# CONSTRUCTION NEWS

Supplement to ENGINEERING NEWS. New York, August 26, 1909.

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## CONSTRUCTION NEWS.

### Plans and Specifications on File.

(* *denotes that this work is advertised in Engineering News.*)

The following plans (P.) and Specifications (S.) are on file (for reference only unless otherwise noted) at office of The Engineering News Publishing Co., 220 Broadway, New York.

| Bids close. | Work. | See issue. |
|---|---|---|
| 8-28 | Store houses, Portsmouth, N. H. (S.) | 7-29 |
| 8-28 | Power bldg., Vallejo, Cal. (S.) | 7-29 |
| 8-28 | Dredging, slip, Boston, Mass. (S.) | 8- 5 |
| 8-28 | Rifle butts, etc., Phila, Pa. (S.) | 8- 5 |
| 8-28 | Barracks, Hingham, Mass. (S.) | 8- 5 |
| 8-30* | Seawall, Galveston, Tex. (S.) | 8- 5 |
| 9- 1* | Elec. plant, Monett, Mo. (S.) | 8- 5 |
| 9- 1* | Park system, Minneapolis, Minn. (S.) | 7- 8 |
| 9- 1* | Tunnel, Chicago, Ill. (P. & S.) | 8- 5 |
| 9- 3* | Lighthouse, Tompkinsville, N. Y. (P. & S.) | 8-12 |
| 9- 8 | Memorial monument, Vicksburg, Miss. (S.) | 8-19 |
| 9-11 | Power station, Mare Island, Cal. (S.) | 8-19 |
| 9-14* | Pumping engines, Detroit, Mich. (P. & S.) | 7-15 |
| 9-18 | Hospital buildings, Washington, D. C. (S.) | 8-19 |
| 10-10* | Seawall, Ft. McRee, Fla. (P. & S.) | 8-19 |

### List of Contracts Pending.

#### LIGHT, HEAT AND POWER PLANTS.

| | | |
|---|---|---|
| 8-28 | Elec. light plant, Fayette, Ohio | 8- 5 |
| 8-28 | Power bldg., Vallejo, Cal | 7-29 |
| 9- 1* | Elec. plant, Monett, Mo | 8- 5 |
| 9- 7 | Elec. generating system, New Orleans, La. | 8-26 |
| 9- 9 | Power plant, Columbus, Ohio | 8-19 |
| 9-11 | Power station, Mare Island, Cal. | 8-19 |
| 10-14* | Elec. motors, Toronto, Ont | 8-19 |

#### BRIDGES.

| | | |
|---|---|---|
| 8-27 | Bridge, etc., Peru, Ind | 8-19 |
| 8-27 | Bridge, Cincinnati, Ohio | 8-26 |
| 8-28 | Bridges, Monterey, Va | 8-26 |
| 8-28 | Bridges, Lauray, Va | 8-26 |
| 8-28 | Bridges, Salem, Ind | 8-19 |
| 8-28 | Bridge, Lewiston, Pa | 8-19 |
| 8-28* | Steel or concrete bridge, Sebec, Me. | 7-15 |
| 8-30 | Bridge, Bowling Green, Ohio | 8-12 |
| 8-30 | Bridge, Mount Vernon, Ohio | 8-12 |
| 8-30 | Bridge repair, Alameda, Cal | 8-19 |
| 8-31 | Bridge, Atlanta, Va | 8-12 |
| 8-30 | Bridges, Augusta, Me | 8-26 |
| 9- 1 | Bridges, Philadelphia, Pa | 8-19 |
| 9- 3 | Bridge, Sandusky, Ohio | 8-19 |
| 9- 3 | Bridge, Mercer, Pa | 8-26 |
| 9- 6 | Bridge, etc., Council Bluffs, Iowa | 8-26 |
| 9- 6 | Bridge, Streator, Ill | 8-26 |
| 9- 6 | Bridges, West Point, Miss | 8-26 |
| 9- 6 | Bridge, Greenville, Miss | 8-26 |
| 9- 6 | Culverts, Shelbyville, Ind | 8-19 |
| 9- 6 | Bridge, Greenwood, Miss | 8-19 |
| 9- 6 | Bridge, Wytheville, Va | 8-19 |
| 9- 7 | Bridges, Clear Lake, Iowa | 8-19 |
| 9- 7 | Bridge, Brazil, Ind | 8-19 |
| 9- 7 | Bridge, Fostoria, Ohio | 8-19 |
| 9-7* | Bridge designs, etc., Phoenix, Ariz. | 8-12 |
| 9- 7 | Bridge, Oliversburg, Ohio | 8-26 |
| 9- 8* | Bridges, Chicago, Ill | 8-26 |
| 9- 8 | Bridge, Pala, Cal. | 8-19 |
| 9-10 | Bridge, Jacksonville, Fla | 8-26 |
| 9-11* | Bridge, Green River, Utah | 8-26 |
| 9-13 | Bridges, Barberton, Ohio | 8-26 |
| 9-14 | Bridge, Trenton, N. J. | 8-26 |
| 9-14 | Trestle, Springston, Idaho | 8-19 |
| 9-21* | Steel bridge, Merced, Cal. | 7-29 |
| 9-23 | Bridge, Umatilla Reservation, Ore | 8-26 |

#### BUILDINGS.

| | | |
|---|---|---|
| 8-27 | Stables, etc., Ft. Snelling, Minn. | 8-26 |
| 8-28 | Barracks, Hingham, Mass | 8- 5 |
| 8-28 | Storage houses, Portsmouth, N. H | 7-29 |
| 8-30 | Post-office, Paris, Ky | 7-29 |
| 8-31* | Post-office, New Orleans, La | 7-29 |
| 8-31 | Capitol, Madison, Wis | 8- 5 |
| 8-31 | Heating plant, Indianapolis, Ind. | 8-19 |
| 8-31 | Heating, Indianapolis, Ind | 8-26 |
| 9- 1 | Plant equipment, Rogers, Ark. (Mfg. Pl.) | 8-19 |
| 9- 2 | Post-office, Manhattan, Kan | 8-12 |
| 9- 2 | University, Morgantown, W. Va. | 8-26 |
| 9- 3 | Library, Indianapolis, Ind | 8-26 |
| 9- 6 | Court-house, Jasper, Ind | 7-29 |
| 9- 7 | Mech. equip., New Orleans, La. | 8- 5 |
| 9- 7 | Heating, etc., London, Ind | 8-26 |
| 9- 7* | Hospital, Ft. Yellowstone, Wyo. | 8-26 |
| 9- 7 | Laundry (Mfg. Pl.), New York | 8-26 |
| 9- 7 | Repair shop (Mfg. Pl.), N. Y. | 8-26 |
| 9- 7 | Engine house, New York | 8-26 |
| 9- 7 | Heating, etc., New York | 8-26 |
| 9- 8 | Air exhausting system, Grand Rapids, Mich | 8-19 |
| 9- 9* | Post-office, Saratoga Springs, N. Y | 8- 5 |
| 9-13 | Asylums, St. Paul, Minn | 8-26 |
| 9-14 | Building, Hartford, Conn | 8-19 |
| 9-14 | Building, Fort Wayne, Ind | 8-19 |
| 9-14* | Heat and power plant, Supply, Okla | 8-19 |
| 9-15* | Science hall, Washington, D. C. | 8-19 |
| 9-15* | Building, Washington, D. C. | 8-26 |
| 9-16 | Post-office, San Angelo, Tex | 8-12 |
| 9-18 | Hospitals, Chelsea, Mass | 8- 5 |
| 9-18 | Hospital buildings, Wash., D. C. | 8-19 |
| 9-20* | Post-office, etc., Richmond, Va. | 8-19 |
| 9-27 | Factory (Mfg. Pl.), Marshaltown Iowa | 8-26 |
| 9-28* | Post-office, Woonsocket, R. I. | 8-26 |
| 9-29 | Post-office, Great Falls, Mont. | 8-26 |
| 10- 1* | Post-office, Denison, Tex | 8-26 |
| 9- 3* | Paving, Paris, Ill | 8-26 |

#### WATER-WORKS.

| | | |
|---|---|---|
| 8-27 | Water-works, etc., Tyler, Minn. | 8-19 |
| 8-27 | Water system, Chicago, Ill | 8-26 |
| 8-28 | Foundations, Chicago, Ill | 8-26 |
| 8-28 | Tank and tower, Biwabik, Minn. | 8-26 |
| 8-30* | Well, Fort Morgan, Ala | 8- 5 |
| 8-30* | Water extension, Fort H. G. Wright, N. Y. | 8-12 |
| 8-30* | Reservoir addition, Monticello, Ia. | 8-19 |
| 8-31 | Water system, Seattle, Wash | 8-19 |
| 9- 1* | Engine, Perth Amboy, N. J | 8-12 |
| 9- 1 | Reservoir, Doylestown, Pa | 8-26 |
| 9- 1 | Standpipe, etc., Morristown, N Y. | 8-26 |
| 9- 2 | Water mains, Bloomington, Ill. | 8-19 |
| 9- 2 | Water mains, Brooklyn Heights, Ohio | 8-19 |
| 9- 3 | Reservoir, Carthage, Mo | 8-26 |
| 9- 5* | Dam, etc., Lamar, Colo | 8-26 |
| 9- 6 | Water-works, Smithfield, N. C. | 8- 5 |
| 9- 6* | Water main, Vicksburg, Miss | 7-29 |
| 9- 7 | Water-works, Hot Sulphur Springs, Colo | 8-19 |
| 9- 7* | Filter plant, South Milwaukee, Wis | 8-26 |
| 9- 8 | Remodeling water-works, etc., Macon, Miss | 8-26 |
| 9- 8* | Mains, Christiansburg, Va | 8-26 |
| 9- 9* | Relining reservoir, Doylestown, Pa | 8-26 |
| 9- 9* | Water-works, Henryetta, Okla | 8-19 |
| 9-13 | Water-works, Hartshorne, Okla. | 8-19 |
| 9-13* | Dam, etc., Newburgh, N. Y. | 8-26 |
| 9-14 | Aqueduct, Montreal, Que | 8-19 |
| 9-14 | Gate valves, etc., Richmond, Va. | 8-26 |
| 9-14 | Pumping engines, Detroit, Mich. | 7-15 |
| 9-15* | Coagulating basin, High Point, N. C | 8-26 |
| 9-20* | Water-works, Marietta, Ga | 8-26 |
| 9-30 | Filter plant, Rock Island, Ill | 8-26 |
| 10-14* | Turbine pumps, Toronto, Ont | 8-19 |

#### SEWERS.

| | | |
|---|---|---|
| 8-27* | Sewer, Bordentown, N. J | 8-12 |
| 8-27 | Sewer, Louisville, Ky | 8-19 |
| 8-27 | Sewers, Sterling, Ill | 8-26 |
| 8-30 | Sewer, Oklahoma City, Okla | 8-26 |
| 8-30 | Sewers, Houston, Tex | 8-26 |
| 8-30 | Sewer, Jefferson Barracks, Mo. | 8-26 |
| 8-30 | Sewer, St. Paul, Minn | 8-26 |
| 8-30 | Sewers, Columbus, Ohio | 8-26 |
| 8-30 | Sewer connections, Pensacola, Fla | 8-26 |
| 8-30 | Sewers, Richmond, Va | 8-26 |
| 8-30 | Sewers, Norfolk, Neb | 8-19 |
| 8-30 | Sewers, Wash., D. C. | 8-19 |
| 8-30* | Sewer, Westfield, N. J. | 8-12 |
| 8-31 | Sewers, Appleton, Wis | 8-26 |
| 9- 1 | Sewers, El Reno, Okla | 8-26 |
| 9- 1 | Regulating valves, Syracuse, N. Y. | 8-26 |
| 9- 1* | Sewers, etc., Baltimore, Md. | 8-12 |
| 9- 1 | Sewer, etc., West Pownal, Me. | 8-12 |
| 9- 1 | Sewers, Rogers, Ark | 7-29 |
| 9- 1 | Sewer system, Portage, Wis | 8-19 |
| 9- 3* | Sewer, Louisville, Ky | 8-26 |
| 9- 6* | Sewers, Huntingdon, Pa | 8-26 |
| 9- 6* | Sewer, Vicksburg, Miss | 7-29 |
| 9- 7 | Sewers, Connellsville, Pa | 8-26 |
| 9- 7* | Sewer, Philipsburg, Pa | 8-26 |
| 9- 7 | Sewer, New York | 8-26 |
| 9- 8 | Sewers, Columbus, Ohio | 8-26 |
| 9- 9 | Sewers, etc., Orillia, Ont | 8-26 |
| 9-20* | Sewers, Fort Morgan, Ala | 8-26 |
| 9-24* | Sewer, Louisville, Ky | 8-26 |

#### STREETS AND ROADS.

| | | |
|---|---|---|
| 8-27* | Highway repair, Albany, N. Y. | 8-12 |
| 8-27 | Pike impvt., Cincinnati, Ohio | 8-19 |
| 8-27 | Street impvt., Louisville, Ky | 8-26 |
| 8-28 | Paving, etc., Chicago, Ill | 8-26 |
| 8-28 | Road repair, Cleveland, Ohio | 8-19 |
| 8-28* | Sidewalks, Wash., D. C | 8-19 |
| 8-28* | Paving block, etc., Norfolk, Va. | 8- 5 |
| 8-30 | Sidewalks, Fort Howard, Md | 8- 5 |
| 8-30 | Road, Rushville, Ind | 7-29 |
| 8-30 | Road, Baltimore, Md | 8-26 |
| 8-30 | Road, Emporia, Va | 8-26 |
| 8-31* | Paving, etc., Herkimer, N. Y. | 8-26 |
| 8-31 | Grading, etc., Hornell, N. Y. | 8-26 |
| 8-31 | Regulating, etc., New York | 8-26 |
| 8-31 | Paving, Newark, Ohio | 8-26 |
| 8-31 | Driveway, Tacoma, D. C | 8-19 |
| 9- 1 | Paving, El Reno, Okla | 8-12 |
| 9- 1 | Grading, etc., Hartford City, Ind. | 8-19 |
| 9- 1 | Roadway repair, Brooklyn, N. Y. | 8-19 |
| 9- 1 | Paving, Elizabeth, N. J | 8-26 |
| 9- 1 | Roads, Washington, Pa | 8-26 |
| 9- 1 | Paving, Little Rock, Ark | 8-26 |
| 9- 2 | Highway repair, etc., Albany, N. Y | 8-26 |
| 9- 2 | Pavement, New York | 8-26 |
| 9- 2 | Road, Upper Sandusky, Ohio | 8-26 |
| 9- 2 | Road repairs, Toledo, Ohio | 8-26 |
| 9- 2 | Grading, etc., Akron, Ohio | 8-19 |
| 9- 2 | Resurfacing, New York | 8-19 |
| 9- 3 | Boulevard, Indianapolis, Ind | 8-26 |
| 9- 3* | Paving, Paris, Ill | 8-26 |
| 9- 4 | Macadam, Columbus, Ohio | 8-19 |
| 9- 6 | Roads, Knox, Ind | 8-19 |
| 9- 6 | Road, Tipton, Ind. | 8-19 |
| 9- 6 | Road, Delphi, Ind | 8-19 |
| 9- 6 | Road, Greencastle, Ind | 8-19 |
| 9- 6 | Road, Vernon, Ind | 8-19 |
| 9- 6 | Road, Shelbyville, Ind | 7-29 |
| 9- 6* | Paving, Vicksburg, Miss | 7-29 |
| 9- 6 | Road, Scottsburg, Ind | 8-26 |
| 9- 7* | Pavements, Bayonne, N. J | 8-26 |
| 9- 7 | Street repairs, White Plains, N. Y. | 8-26 |
| 9- 7 | Roads, Peru, Ind | 8-26 |
| 9- 7 | Road, Kentland, Ind | 8-26 |
| 9- 7 | Roads, Rockville, Ind | 8-26 |
| 9- 7 | Roads, etc., Fort Leavenworth, Kan | 8-26 |
| 9- 7 | Roads, Fowler, Ind | 8-19 |
| 9- 7* | Street impvt., Westfield, N. J | 8-19 |
| 9- 7 | Grading, St. Paul, Minn | 8-19 |
| 9- 7 | Road, Vincennes, Ind | 8-19 |
| 9- 7 | Road, Williamsport, Ind | 8-19 |
| 9- 8* | Grading, etc., Griffin, Ga | 8-12 |
| 9- 8 | Grading, etc., Atlantic City, N. J. | 8-26 |
| 9- 8 | Roads, Muncie, Ind | 8-26 |
| 9- 8 | Roads, Noblesville, Ind | 8-26 |
| 9- 8 | Road, Winamas, Ind | 8-26 |
| 9- 8 | Roads, Bluffton, Ind | 8-26 |
| 9- 8 | Pavement, Hutchinson, Kan | 8-26 |
| 9-10 | Road oiling, Cincinnati, Ohio | 8-26 |
| 9-10 | Roads, Bloomington, Ind | 8-26 |
| 9-14 | Paving, Newport News, Va | 8-26 |
| 9-15 | Roads, Clinton, Tenn | 8-26 |
| 9-15* | Roads, etc., Fort Andrews, Mass. | 8-26 |

#### MISCELLANEOUS.

| | | |
|---|---|---|
| 8-26 | Tile ditch, Sac City, Iowa | 8-26 |
| 8-27* | Vacuum system, Houston, Tex | 8- 5 |
| 8-27 | Fire engine, Duluth, Minn | 8-12 |
| 8-28 | Dredging, slip, Boston, Mass | 8- 5 |
| 8-28 | Rifle butts, etc., Phila, Pa | 8- 5 |
| 8-28* | Dredging, New York | 7-29 |
| 8-28* | Dredging, Champaign, Ill | 8-19 |
| 8-30* | Steel fences, Cheyenne, Wyo | 8-19 |
| 8-30* | Seawall, Galveston, Tex | 8- 5 |
| 8-30 | Levee, New Orleans, La | 8-12 |
| 8-30* | Storehouse, Wash., D. C | 8-12 |
| 8-30 | Drainage, Arcadia, Tex | 8-12 |
| 8-31 | Refrigerators, Chicago, Ill | 8-19 |
| 8-31* | Rifle range, Albany, N. Y | 8-19 |
| 8-31 | Steamer repairs, New York | 8-26 |
| 8-31 | Lumber, Panama | 8-26 |
| 9- 1 | Levee, West Memphis, Ark | 8-19 |
| 9- 1 | Ditch, Harrisburg, Ark | 8-12 |
| 9- 1* | Tunnel, Chicago, Ill | 8- 5 |
| 9- 1* | Park system, Minneapolis, Minn. | 7- 8 |
| 9- 2 | Gravel, cement, etc., New York | 8-26 |
| 9- 2 | Drain pipe, New York | 8-26 |
| 9- 3* | Light-house, Tompkinsville, N. Y. | 8-12 |
| 9- 3* | Seawall, Boston, Mass | 8-26 |
| 9- 4 | Dredging pumps, St. Louis, Mo. | 8-26 |
| 9- 4 | Dredging, Tiburon, Cal | 8-12 |
| 9- 6 | Ditch, Hallock, Minn. | 8-26 |
| 9- 6 | Ry., Esquimalt & Nanaimo Ry. | 8-12 |
| 9- 7 | Brick, New York | 8-26 |
| 9- 7 | Ditch, St. Paul, Minn | 8-26 |
| 9- 7 | Ditches, Webster City, Iowa | 8-26 |
| 9- 7 | Piers, No. Chicago, Ill | 8-26 |
| 9- 7 | Supplies, Panama | 8-19 |
| 9- 9 | Supplies, Panama | 8-19 |
| 9- 8 | Memorial monument, Vicksburg, Miss | 8-19 |
| 9- 9 | River work, New Orleans, La | 8-19 |
| 9- 9 | Pile driver, Burrwood, La | 8-19 |
| 9-10* | Seawall, Ft. McRee, Fla | 8-19 |
| 9-10* | Excavation, etc., Fort Totten, N. Y. | 8-19 |
| 9-10 | Culvert, Cincinnati, O. | 8-26 |
| 9-10* | Dredging, Buffalo, N. Y | 8-26 |
| 9-14* | Dredging, Raritan, N. J | 8-19 |
| 9-14* | Jetties, New York, N. Y | 8-26 |
| 9-15* | Creosoted material, Galveston, Tex | 8-19 |
| 9-15* | Air compressor, Pittsburg, Pa | 8-19 |
| 9-15* | Breakwater, Newport, R I. | 8-19 |
| 9-16* | Excavation, levee, Norfolk, Va. | 8-26 |
| 9-20 | Steel tugboat, Panama | 8-26 |
| 9-20* | Dam, machinery, Cincinnati, O. | 8-26 |
| 9-28 | Vacuum system, Pierre, S. Dak. | 7-15 |
| 9-30 | Steamer, Ottawa, Ont | 8-26 |
| 10- 5 | Monument, Sharpsburg, Md | 8-26 |
| 10- 6* | Steel barges, Vicksburg, Miss | 8-19 |

#### EXAMINATIONS.

| | | |
|---|---|---|
| 9-15 | Laboratory Asst., Wash., D. C. | 8-19 |
| 9-15 | Asst. in Agriculture, Wash., D. C. | 8-19 |
| 9-29 | Electrical Asst., Wash., D. C. | 8-19 |
| 9-29 | Engr. of tests, Wash., D. C. | 8-19 |

### RAILWAYS.

(* *denotes that this work is advertised in Engineering News.*)

CANADIAN NORTHERN.—Contract for the 30-mile extension from Shell Brook, Sask., has been let to JAMES HIGGINS, of Prince Albert, Sask. Work will be started at once.

CENTRAL OREGON & PACIFIC.—Incorporated in Oregon, with $50,000 capital, with office at Portland. The plans call for a line from Albany, Ore., east across the Cascade range to Ontario, in Malheur County, on the Idaho boundary, 325 miles. The incorporators include: Franklin T. Griffith, Dorsey B. Smith and Charles H. Warner, of Portland.

CUBA, CHOCTAW & GULF.—This company is being organized to build a line from Cuba, Ala., to a point at or near Cromwell, Ala., about 20 miles, with two miles of siding, it is announced. About 800 ft. of trestle and 300 ft. of pipe for culverts will be required. L. Poole will be Pres., Cuba, Ala.; T. W. Allen, Vice-Pres., Cromwell, Ala. About $200,000 of bonds will be issued and negotiations are underway for financing.

FARMERS' RAILWAY & NAVIGATION CO.—Chas. A. Hill, Pres., announces that construction of this proposed railway will begin about Nov. 15. The motive power has not yet been decided upon. The route will be from Umatilla, through Holdman, Helix, Hermiston, Echo and into Pendleton. Headquarters, Pendleton, Ore. Chas. A. Hill is Pres.; A. A. Cole, Secy. and Purchasing Agent, Pendleton, and E. T. Erickson, Hermiston, Ch. Engr. Noted on Aug. 19.

GRAND TRUNK PACIFIC.—Owing to heavy rans the main line between Winnipeg, Man., and Edmonton, Alta., will not be put in operation until Sept. 15. Aug. 15 was the date originally set for opening this section, as noted on Aug. 5.

FOLEY, WELCH & STEWART, St. Paul, Minn., have been awarded the contract for the construction of the 140-mile section of the main line from Copper River to Aldermere, at approximately $10,000,000. This firm has the contract for the section from Prince Rupert, B. C., eastward to the Copper River which is now nearing completion. Noted on July 29.

D. F. McARTHUR, Winnipeg, Man., has received the contract for the construction of the proposed branch line from Tofield to Camrose, Alta. Under the terms of the contract 50 miles of the line must be completed this year. Noted on Aug. 5.

GREENVILLE, GREENWOOD & AUGUSTA.—On Sept. 29 the incorporators of this company will apply for a charter. Subscription books will be opened in the Palmetto Bldg., Charleston, N. C., on Sept. 17. The railroad will connect the points named in company's title. The promoters are Henry Briggs, J. P. Charles, Frank Hammond, J. C. Fawsett and Harry L. Zimmerly, of Charleston.

GULF, SOASH & PACIFIC.—Incorporated in Texas with $50,000 capital. The company's headquarters will be at Big Springs. The plans call for a line from Big Springs, in Howard County, Tex., northwesterly via Borden County, to a point near the north line of Township Ave., east of the town of Lamesa, in Dawson County. The incorporators include: N. H. Lassiter, of Fort Worth; L. S. McDowell, W. Fisher, B. Reagan and M. Hiserote, of Big Springs; H. G. Jackson, of Soash; D. Soash, of Iowa Falls, Iowa; G. A. Leonard, C. C. Wolf, W. P. Soash and W. T. Evans, of Parkersburg, Iowa.

JAMES RIVER VALLEY & NORTHWESTERN.—We are officially advised that the Chicago & Northwestern Ry. Co. will build this projected line from Blunt, S. Dak., on the Chicago & Northwestern Ry., north by Onida to Gettysburg; also on the C. & N. W., with a branch from Onida, east to Hitchcock, on the C. & N. W., in all about 150 miles. C. T. Dike is Ch. Engr., Pierre, S. Dak. Surveys have been made and right-of-way is now being secured. Previously noted.

LAKE ARTHUR, JENNINGS & NORTHERN.—It is planned to begin grading about Oct. 1, and to commence track laying before the end of the year. This railroad will be from 100 to 110 miles long, extending from Lake Arthur, La., via Jennings to Alexandria, La. Bridges will be small. Construction will be done by the company. J. F. Hervey, of Jennings, La., is Engr.-in-Charge. W. B. Conover is Pres.; G. B. Zigler, Vice-Pres.; B. B. Bliss, Secy.; E. P. Fox, Gen Mgr. Noted on June 17.

LONG ISLAND R. R.—The Public Service Commission, Second District, New York State, has received an application from the Long Island R. R. Co. asking for an order authorizing it to issue debentures not to exceed in amount $16,500,000. It is stated in the petition that the Pennsylvania Railroad Co. owns and holds 135,958 shares of the 240,000 shares of capital stock. The proceeds of the bonds are to be used to repay the Pennsylvania Railroad Co. $6,032,951 lent by that company and expended for various improvements during the years 1905 to 1908 inclusive. The company states that it will require within the next three years additional capital for construction work and for equipment necessary to continue the improvements which have been begun, and on which large sums of money have been expended, to provide adequate and proper facilites and accommodations for continuing its business economically. Among the larger items of work which the company has planned are the following: Main line improvement, between Woodside and Jamaica, $2,000,000; Jamaica terminal, $1,000,000; north side improvement (double track and electrification), $1,000,000; Bay Ridge improvement (elimination of grade crossings), $1,000,000; 150 new motor cars, $2,700,000; various freight delivery yards, passenger stations, sidings, double track, grade crossings, etc., $912,662; electrical equipment of tracks and sub-stations, $800,000; Glendale cut-off, $309,382; advances to subsidiary companies for extensions, $327,600; Montauk freight cut-off, $287,400; completion of Atlantic Ave. improvement, $100,000. The Pennsylvania company is willing to make further loans of $10,500,000, in addition to the existing indebtedness, the loans to be secured by the issue of 10-year 4% debentures. See issues of April 29 and May 13.

MEXICO.—A contract has been entered into between the National Railroads of Mexico and the State Government of Durango and the Compania Madeira de la Sierre de Durango, whereby the railway promises to build a branch line 100 kilometers westward from Durango at a cost of $4,000,000. The branch will be the first link of a Durango road to the Pacific Ocean.

MISSISSIPPI WESTERN.—Announcement is made that this company is now ready to finance this enterprise. The line will be about 200 miles long and will run from Meridian via Hazlehurst and other points to

Natchez, Miss. J. W. Hudson is Pres. The Mississippi Western Construction Co. has filed charter to build the line; capital, $30,000; A. H. Longino is Pres., Jackson, Miss.; Chas. F. Schofield, Vice-Pres.; S. Kemp, Secy. and Treas., both at Hazlehurst, Miss. Noted on Aug. 5.

MISSOURI, KANSAS & TEXAS.—The yards at Houston, Tex., will be enlarged and the company will install a new turntable, sandhouse and other facilities for locomotives. The freight depot will be overhauled and partly reconstructed. The work will cost about $100,000. J. W. Petheram is Ch. Engr., Dallas.

MOBILE, JACKSON & KANSAS CITY.—The Mobile, Jackson & Kansas City R. R. Co. was sold under foreclosure at Decatur, Newton County, Miss., on Aug. 23, to Neil A. Weathers, the purchase price being $3,200,000. It is understood that the road was bought in by the bondholders, and that it is the intention of the new holders to change the name to the New Orleans, Mobile & Chicago Railroad Co., the charter for which was recorded here several months ago.

MOULTRIE & WESTERN.—Surveys have not been made yet for this proposed railroad which is to be built from Moultrie via Camilla, to Newton, Ga., about 39 miles, or via the Flint River & Northeastern Ry., to Pelham, Ga. C. W. Pidcock, of Moultrie, is Pres. This company was recently granted a charter to build its line about 40 miles long from Moultrie to Pelham or Camilla, Ga. Capital, $100,000. The incorporators were J. L. Hand, W. S. Hill and D. L. Turner, of Pelham; T. P. Hinman, of Atlanta; W. C. Vereen, C. E. Smith, C. W. Pidcock and B. H. Groover, of Moultrie, Ga.

NEVADA-CALIFORNIA-OREGON RY.—An extension will be built from Alturas, Cal., to Lakeview, Ore., 58 miles, and northward to a point on the Columbia River about 275 miles distant. This railway now runs from Reno, Nev., to Plumas Junction, Cal., and northwest to Alturas, 184 miles. T. F. Dunaway is Gen. Mgr., Reno, Nev.

NEW ORLEANS, MOBILE & CHICAGO.—See Mobile, Jackson & Kansas City R. R.

NORTHERN PACIFIC.—WINSTON BROS., of Minneapolis, Minn., have been awarded the contract to double-track the line between Kalama and Tacoma, Wash. Estimated cost is $1,600,000.

OREGON SHORT LINE.—The UTAH CONSTRUCTION CO., of Ogden, Utah, has been awarded contract for building a 73-mile extension from Rupert to Bliss, Idaho.

SAN LUIS SOUTHERN.—We are officially advised that contract was let last month to J. W. ORCHARD, of Blanca, Colo., to build a standard-gage railroad from a connection with the Denver & Rio Grande R. R. at Blanca, Costilla County, Colo., southerly to Questa, N. Mex., 52 miles. Franklin E. Brooks is Pres., Colorado Springs, Colo.; L. D. Blauvelt, Gen. Mgr. and Ch. Engr., Blanca, Colo. Noted on July 29.

UTAH & IDAHO R. R.—Incorporated in Utah to construct a railway, to be operated either by steam or electricity, from a point on the Ogden & Lucin Railroad at or near Salina, Utah, northerly through Kelton Pass to the state line and then to connect with the Minidoka & Southwestern Railroad near Burley, Idaho, a total distance of 150 miles. Surveys are being made. Construction probably will be commenced within six months. Capital stock, $160,000. Headquarters, Salt Lake City. W. H. Bancroft is Pres.; D. E. Burley, Vice-Pres.; C. H. Jenkinson, Treas., and G. K. Smith, Secy. Incorporators: W. H. Bancroft, J. M. Davis, P. S. Williams and F. H. Knickerbocker.

WINSTON-SALEM SOUTHBOUND.—Contracts have been let recently to build this line from Winston-Salem, N. C., south to Wadesboro, about 90 miles, as follows: Section from 1 to 15 miles, inclusive, starting from Winston-Salem, RINEHART & DENNIS, Evans Bldg., Washington, D. C.; section 16 to 21 miles, inclusive, NAVE BROS. CO., Portsmouth, Ohio; section 22 to 30 inclusive, the RYAN CO., with home office at Portsmouth, Ohio; Section 31 to 35, inclusive, J. T. McKINNEY CONSTRUCTION CO., Lynchburg, Va.; section 36 to 43, inclusive, LUCK CONSTRUCTION CO., Roanoke, Va.; section 44 to 55, inclusive, FERGUSON CONSTRUCTION CO., 37-43 Wall St., New York; section 56 to 65, inclusive, WALTON CO., Falls Mills, Va.; section 66 to 70, inclusive, McCURY CONSTRUCTION CO., Marion, N. C.; section 71 to 75 has not been awarded, but will probably be announced soon; section 76 to 85, inclusive, J. R. McDOWELL & CO., Knoxville, Tenn.; section 86 to 89, inclusive, J. T. BENNETT, Danville, Va. Noted on July 29 and Aug. 12.

## ELECTRIC RAILWAYS.

SIDNEY, N. Y.—E. C. Bennett, of Pulaski, N. Y., has applied to the Board of Trustees for a franchise to build an electric railway from Sidney to Treadwell.

BALTIMORE, MD.—The Baltimore & Eastern Shore Ry. Co. has been incorporated to build an electric railway from Baltimore to Cambridge, with a ferry connecting Bay Shore and Kent County. The incorporators are William H. Fehsenfeld, Charles H. Knapp, E. Asbury Davis, Ezekiel T. Jones, Arlie F. Saunders, R. A. McCormick, Alex. H. McDonald, Davis M. Fulton and George P. Neilson, all members of the Travelers' and Merchants' Association of Baltimore. Clarence W. Perkins is Att'y. Capital stock, $50,000.

ATLANTA, GA.—Surveys are completed and right-of-way obtained by the Atlanta, Griffin & Macon Elec. Ry. Co. for its proposed line between Atlanta, Griffin and Macon. Franchises have been secured from the cities through which the railway will pass. Power for the railway will be furnished by the Central Georgia Power Co., which is completing the construction of a dam and power plant on the Ocmulgee River, which will have a capacity of 21,000 HP. Previously noted.

MEMPHIS, TENN.—The Lake View Traction Co. will build an extension to Collierville, Tenn. The line to Lake View will be constructed first. R. F. Tate is Pres., North Memphis Savings Bank Bldg., Memphis.

FINDLAY, OHIO.—Final right-of-way is being secured between Findlay and Kenton by the Toledo, Bowling Green & Southern Traction Co.'s extension. C. F. Smith, Findlay, is Gen. Engr.

LEBANON, OHIO.—The Lebanon & Franklin Traction Co. will extend its line to Springboro, four miles, it is stated. Robt. E. Kline, Dayton, Ohio, is Pres. and Gen. Mgr.

NELSONVILLE, OHIO.—We are officially advised that the Hocking-Sunday Creek Traction Co. will do its own construction work on the first 14-mile section of its line. As noted on July 29, this line will run from Nelsonville to Athens with branches to Chauncey and Glouster, Ohio. Surveys have been made and right-of-way secured. E. B. Young is Pres. and Warren H. Badger, Ch. Engr., at Nelsonville.

MICHIGAN CITY, IND.—The City Council has granted to the Chicago, Lake Shore & South Bend Ry. Co. an extension of its franchise until September, 1910, in which to complete its proposed branch into Michigan City. H. V. Wallace is Gen. Mgr., at Michigan City, Ind.

KOKOMO, IND.—The County Commissioners are stated to have granted a franchise to C. C. McFann, Pres. and Gen. Mgr. of the Kokomo Western Traction Co., to construct a railway from Kokomo west to Young America. The railway will be extended later to Burlington and Flora, a total distance of 15½ miles. Previously noted.

COLUMBUS, IND.—Surveys are made by the Columbus, Greensburg & Richmond Traction Co. for its proposed line. It will be 90 miles long and will connect Columbus and Richmond. August M. Kuhn, Indianapolis, is Pres.; R. E. Moore, 116 S. Audubon Road, Indianapolis, is Secy.

DETROIT, MICH.—Grading on the Detroit, Lansing & Grand Rapids Ry. from Detroit to Grand Rapids, via Lansing, a distance of about 135 miles, has been started. The railway will be operated by overhead trolley. Capital stock authorized, $25,000; bonds authorized, $5,000,000. Headquarters, 706 Union Trust Bldg., Detroit. Officers: Oliver H. Lau is Pres. and Gen. Mgr.; Henry M. Wallace, Vice-Pres.; George Valentine, Secy. and Treas., and F. A. Bean, Ch. Engr., all of Detroit. Noted on Aug. 12.

KANKAKEE, ILL.—Right-of-way is being secured by the Danville, Kankakee & Crescent Traction Co. between the points named in this title. Survey is completed. J. P. Sterrenberg, Crescent City, Ill., is named as the promoter.

The Kankakee & Urbana Traction Co. has been incorporated with principal office at Kankakee. The capital stock is nominally $200,000. It is proposed to construct the road from Kankakee through the Counties of Kankakee, Iroquois, Ford and Champaign, to Urbana; from Champaign through the Counties of Douglas and Coles to Charleston, and to Piper City. The incorporators and first Board of Directors are R. F. Cummings, George M. Bennett, Ira N. Palmer, W. J. West, Upton Schaub, C. E. Thrasher, W. J. Brook and W. D. Moore, Jr.

SUPERIOR, WIS.—The Superior Traction Co. has been incorporated to operate an electric railway system in Superior. Capital stock, $100,000. Incorporators: Richard Russell, P. J. Eckstand and S. L. Perrin.

BOONE, IOWA.—The Iowa Light & Traction Co. has been incorporated in South Dakota to build an electric railway from Boone to Ogden, Iowa, with branches to Ames, Story City, Eldora, Des Moines, Webster City and Perry, Iowa. Capital stock, $500,000. Headquarters, 153 La Salle St., Chicago, Ill., and Eldora, Iowa. Incorporators and officers: Henry S. Osborne, Chn. of Board; Andrew Stevenson, Pres. and Gen. Mgr., Chicago; E. E. Hughes, Boone, Iowa, Vice-Pres. and Treas.; J. H. McBride, Philadelphia, Pa., Second Vice-Pres.; J. F. Hardin, Eldora, Iowa, Secy.

EDNA, KAN.—The City Council has granted a franchise to the Kansas Union Traction Co. to build its proposed electric railway through Edna. The company plans to begin construction on the two routes this fall, connecting Cherryvale and Columbus and Parsons and Coffeyville, Kan. Barney McDaniel, Altamont, is Secy. ARCHER & ROLLINS, Kansas City, Mo., are the contractors.

HANNIBAL, MO.—The Hannibal & Northern Missouri R. R. probably will let grading contracts soon. This line is projected from Hannibal, Mo., to Kirksville, 100 miles. The Roberts & Abbott Co., Cleveland, Ohio, are the Engrs. Noted fully on July 1.

SAN ANGELO, TEX.—The San Angelo Street Railway Co. has been organized to build a proposed electric railway. Capital, $100,000. Sam Crowther, Pres.; E. E. Bailey, Vice-Pres.; C. W. Hobbs, Secy.; C. A. Broome, Treas. Other incorporators: George Hagelstein, L. L. Farr, J. D. O'Daniel, A. M. Hicks, J. D. Suggs, E. W. Walker, P. C. Meadow, John W. Harris, J. C. Sempez, O. E. Stevenson and W. T. Bartholomew.

PORT ARTHUR, TEX.—Contract for building the Port Arthur Street Ry. has been awarded to H. E. TALBOTT & CO., Reibold Bldg., Dayton, Ohio. Financial arrangements have been completed and surveys will be started at once. The company expects to apply for a charter within a few days and the title will be changed to the Port Arthur Traction Co. H. J. Meyers, A. H. Reeder, S. M. Rohn, of Dayton, Ohio, and A. L. Davis, of Houston, Tex., are the incorporators. The line will be about six miles.

EL PASO, TEX.—The El Paso & Fort Hancock Ry. Co. probably will begin construction of its electric railway from El Paso to Ysleta, a distance of ten miles, in October. Bids for the ties and rails for the ten miles of track have been received and will be opened Sept. 1, it is stated. The repair shops probably will be located at Ysleta. Capital stock authorized, $100,000; subscribed, $70,000. C. N. Bassett is Pres.; Felix Martinez, Vice-Pres.; W. Cooley, Treas., and Thomas O'Keefe, Secy., all of El Paso.

GREENVILLE, TEX.—J. W. Crotty and L. A. Miller, Dallas, have applied to the City Council for a franchise to build an electric railway in Greenville.

SALT LAKE CITY, UTAH.—We are officially advised that the Falkenau Electrical Construction Co., Stock Exchange Bldg., Chicago, has completed the design of three large bridges for the Salt Lake & Ogden Railway Co. and is now calling for bids for the fabrication and delivery of the required steel. The bridges will be erected by the Falkenau Electrical Construction Co.'s own organization in connection with the work of the electrification of the Salt Lake & Ogden Ry., the complete contract for which was recently awarded to the FALKENAU ELECTRICAL CONSTRUCTION CO. H. A. Strauss, Vice-Pres. of the Falkenau Electrical Construction Co., is Consult. Engr. for the Sale Lake & Ogden Railway Co., and the complete electrification of this system has been designed and is now being carried out to rapid completion under his direct supervision. The work involves the electrification of about 40 miles of existing steam railway of standard-gage laid with 85-lb. rail, and includes a 2,500-KW. main generating station and four high-tension sub-stations, each containing 800 KW. in converter and transformer capacity; 40 miles of track bonding with the twin terminal type of bond; 80 miles of 4-0 grooved section trolley wire; 40 miles of 750,000 C. M. feeder; 5,000 wooden poles for cross-suspension spans; Siemens-Martin galvanized strand for guys and cross-suspension; overhead line material for 700-volt D.-C. operation; 10 motor cars with double and multiple unit control, each equipped with 4 100-HP. motors and automatic air brakes. The system is designed with a 35-ft. cross-suspension to permit of double tracking, which is to be undertaken in the near future. The bridges designed by the Falkenau Electrical Construction Co. consist of the following: Bridge No. 1, of the double-track through-girder type for overhead crossing of Wall Ave., Ogden. Bridge No. 2, a double-track composite bridge consisting of the combination of a pony truss, a steel tower and a deck girder. Bridge No. 3, a double-track concrete bridge consisting of two spans of 80 ft. each, with a rise of 26 ft.

VANCOUVER, B. C.—The British Columbia Electric Ry. Co. has awarded the contract for the construction and grading of the New Westminster and Chilliwack section of its extension, a distance of 12 miles to the PUGET SOUND DITCH & DREDGING CO., Vancouver. It has also awarded contracts to PALMER BROS. and PETER HENNING, Everett, Wash., for the Chilliwack and Abbotsford, B. C., section, which will cost $150,000. The contractors' headquarters will be at Chilliwack. The contracts call for completion in six months.

## LIGHT AND POWER PLANTS.

WAREHAM, MASS.—The BUZZARDS BAY LIGHTING CO. has been awarded the contract for installing electric lamps in the town of Wareham. The company is planning to furnish electricity in all the towns from Wareham to Falmouth. Eugene Carpenter is interested in the company.

WORCESTER, MASS.—A permit has been granted to the Connecticut River Transmission Co. to erect a transformer station in Greendale. Estimated cost, $10,000. J. G. White & Co., of New York, N. Y., are Engrs., and FRED T. LEY & CO., contractors.

WILLIMANSETT, MASS.—The citizens are contemplating the installation of an electric lighting system, the service to be furnished from the municipal electric light plant at Chicopee.

BOSTON, MASS.—We are officially advised that bids were received as follows on Aug. 20 by Lieut.-Col. Edward Burr, Corps Engrs., U. S. A., for cambric insulated and rubber insulated cable: Standard Underground Cable Co., Westinghouse Bldg., Pittsburg, Pa., $14,972; General Electric Co., Schenectady, N. Y., $15,087; The Safety Insulated Wire & Cable Co., New York, $1,802 (rubber insulated cable only); American Steel & Wire Co., Worcester, Mass., $1,805 (rubber insulated cable only).

SALEM, N. Y.—Plans are being considered by the Salem Light, Heat & Power Co. for the installation of a day service for both lamps and motors, and the installation of an auxiliary gas engine of 150 HP. for use in case the water supply fails, and to extend the power service to Raleigh, four miles distant. The power station of the company is located about four miles from the village on Battenkill Creek. W. H. Simpson is Supt.

GOUVERNEUR, N. Y. — The Village Board has awarded the contract for lighting the streets of the village for the next five years, commencing next October, to the OSWEGATCHIE LIGHT & POWER CO. The company is to furnish arc lamps for $45 each per year with an all-night service, and 32-c.p. incandescent lamps for $10 per lamp per year.

BERLIN, N. Y.—The Berlin Electric Light, Heat & Power Co. has been granted permission by the Public Service Commission, Second District, to issue $5,000 in capital stock for improvements and extension to its plant, and has also approved of the extension of the distributing system from Berlin to Petersburg.

WEST POINT, N. Y.—We are officially advised that the following bids were received by Major J. M. Carson, Jr., Q. M., West Point, for furnishing and installing electric light and gas fixtures in double officers' quarters Nos. 10, 11, 12, 13 and in lieutenants' quarters No. 5, etc. [illegible] Enos Co., 36 West 37th St., New Yor[illegible] ,071; Wahle, Phillips Co., 549 West 5[illegible] New York, $5,994; E. P. Gleason M[illegible] , 37 Murray St., New York, $6,718; [illegible] Storsberg, 20 Atlantic St., Newark, N. J[illegible] 89; L. Perelson, Inc., 202 Centre St., [illegible] York, $6,261; Horn & Brannen Mfg. Co[illegible] North Broad St., Philadelphia, $5,755; [illegible] Reading Chandelier Works, Reading, Pa[illegible] 768; the Mitchell Vance Co., 836 Bro[illegible] New York, $5,527; Cassidy & Son M[illegible] 133 West 23d St., New York, $5,12[illegible]

UNION BRIDGE, MD[illegible] Tidewater Portland Cement Co., 11[illegible] adway, New York, has awarded contr[illegible] for designing and erecting a new 3,000[illegible] cement plant in Union Bridge to the [illegible]LER ENGINEERING CO., of Allentow[illegible] a. The plant will be operated by electr[illegible] throughout. Contracts for machinery [illegible] soon be let, specifications for which wil[illegible] made by the Fuller Engineering Co., wh[illegible] will also receive bids for the equipment. The purchases will be made by the Tidewa[illegible] Portland Cement Co. John K. Tener, o[illegible] arleroi, Pa., is Pres., and Joseph T. F[illegible]ing, of New York, Vice-Pres.

CUTHBERT, GA.—An elect[illegible] will be held in October to vote on the pro[illegible]ition to issue bonds for improvements to t[illegible] electric light plant, water-works and sew[illegible]age systems. J. B. McCrary, of Atlanta, Ga., is Engr.

DOUGLASVILLE, GA.—The city has issued $10,000 of bonds for improvements to the municipal electric light plant.

SPEIGNER, ALA.—Work has commenced by the State Convict Bureau on the construction of a dam in connection with a proposed power plant. Edgar B. Kay, of Tuscaloosa, Ala., is Engr.-in-Charge. J. Craig Smith is Pres. Bureau.

NEW ORLEANS, LA.—Bids will be received until Sept. 7 at the office of James Knox Taylor, Supervising Arch., Washington, D. C., for mechanical equipment, excepting elevators, including plumbing, gas fitting, boiler plant, heating and ventilating system, electric generating system, vacuum cleaning system and clock system, for the U. S. post-office and court-house building at New Orleans, in accordance with the drawings and specifications, copies of which may be obtained at the above office, or at the office of Hale & Rogers, Archs., 11 East 24th St., New York.

COLUMBUS, OHIO.—See item under Buildings.

MARION, IND.—The City Council is preparing to ask for bids for the erection and equipment of an electric light plant.

PORTLAND, IND.—The City Council is considering the building of a new electric light plant.

NEW CARLISLE, IND.—Negotiations have been closed whereby the South Shore & South Bend Ry. Co. will supply the town with electrical energy for a term of 25 years. The town has been operating a municipal electric plant, a direct-current, 220-volt system, in connection with the water-works plant. The company will supply alternating current, single phase, 25 cycles, 110-220 volts. It is expected that series tungsten street lamps will be installed.

LA SALLE, ILL.—Plans are being prepared by the Citizens' Lighting Co. for improvements and extensions to the plant, which will involve an expenditure of about $42,000, and include the installation of a 300-KW. steam turbine with pumps and condensers, a 200-KW. alternating-current generator and other equipment required for changing the lighting system from direct to alternating current.

LARSEN, WIS.—The capital stock of the Larsen Telephone Co. has been increased from $5,000 to $10,000.

CEDAR RAPIDS, IOWA.—Contracts have been awarded by the Cedar Rapids & Iowa City Ry. & Light Co. for improvements to its power-house in Cedar Rapids, aggregating $125,000. The output of the plant will be increased to 8,000 KW. H. M. Byllesby & Co., of Chicago, Ill., are Consulting Engrs.

COUNCIL GROVE, KAN.—The City Council has granted H. H. Sparks, of Junction City, Kan., a franchise to construct and operate an electric light and power plant here.

ST. JOHNS, KAN.—Bids will be received about Sept. 15 by Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., for the construction of an electric light plant, water-works and sewer systems. Bonds for $40,000 have been voted.

EDGAR, NEB.—At a special election on Aug. 5 the citizens voted to issue $5,000 of bonds for the purchase of an electric light plant. The town holds an option of $4,000 on the plant of the Edgar Light & Power Co., which will be paid from the bonds voted. The remainder will be used to install new equipment in the plant.

VALLEY, NEB.—See item under Water Supply—Irrigation.

GRAND FORKS, N. DAK.—We are officially advised that bids have been received for the construction of an electric light plant. Earle D. Jackson, Globe Bldg., St. Paul, Minn., is Engr.; W. H. Alexander is City Audr. Contract was awarded on Aug. 19 to the ELECTRICAL CONSTRUCTION CO., St. Paul, Minn., at $29,[illegible], for laying wires, conduit and installing 1[illegible] lamp-poles, five lights to post.

BENTON, ARK.—The Atkinson Water Power Co., recently organized, proposes to operate a water power plant on Saline River. The officers of the company are J. F. Lee, Pres., and J. R. Gibbons, Secy. and Treas.

ESPANOLA, N. MEX.—Preparations are being made by the Espanola Milling & Elevator Co. for the construction of a 2,000-HP. electric plant on the Santa Cruz River, north of Espanola. George Bond, of Trinidad, Colo., and Frank Bond, of Espanola, are interested.

PORTALES, N. MEX.—It is reported that bids will be received about Sept. 15 by H. B. Ryther, City Clk., for the construction of an electric light plant and water-works system. Estimated cost, $50,000. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

TUCSON, ARIZ.—The Sonora Copper Co. is planning to install an electric power plant, an aerial tramway and a 100-ton matting furnace in the Caracahui Mountains, about three miles from the Sonora R .R. A. N. Conrad will have charge of the work.

TORONTO, ONT.—Contracts for the construction of eight transformer stations have been awarded by the Hydro-Electric Power Commission. The contract for constructing the stations at St. Mary's, Stratford, Berlin and Guelph was awarded to EDGE & GUTTERIDGE, of Seaforth, at $18,000 each; the buildings at Preston, Paris, Woodstock and St. Thomas, to JOHN HAYMAN & SON, of London, at $19,850 each.

CALGARY, ALTA.—Plans have been completed by Smith, Kerry & Chace, of Toronto, Ont., and contracts will soon be awarded for the construction of the main dam, headworks, power-house, retaining walls, erection of steel racks, penstocks, sluice gates and other work necessary for the plant of the Calgary Power & Transmission Co. on the Bow River, about 45 miles west of here.

## BRIDGES.

AUGUSTA, ME.—Bids will be received until 11 a. m., Aug. 30, by Paul D. Sargent, State Comr. of Highways, Augusta, for two bridges, one to be constructed over the Aroostook River at Mascardis, 216-ft. single span, and will require 480 cu. yds. masonry, and the other over the East Branch of the Penobscot River, at Medway, of two spans 170 ft. each, and will require 450 cu. yds. masonry. Bids will be received separately on the superstructure and the masonry.

BANGOR, ME.—All bids opened on Aug. 2 by the Mayor and Street Engineers at the office of P. H. Coombs, City Engr., for repairs and reinforcements of the foundations of the bridge across the Penobscot River, between Bangor and Brewer, have been rejected.

TAUNTON, MASS.—Contract for constructing the bridge over Mill River, at W. Adams St., bids opened on Aug. 10, has been awarded to W. S. AEREDLE & SON, of East Boston, at $7,400. E. I. Crossman is Mayor.

BLOOMFIELD, N. J.—The Board of County Freeholders, Newark, has awarded contract for constructing the bridge at West St., Bloomfield, to the GOELLER IRON WORKS and A. E. SANFORD, at $4,340. Bids were opened Aug. 9.

TRENTON, N. J.—The Board of County Freeholders has approved plans for the combination steel and concrete bridge to be constructed across Honey Brook, in Hopewell Township. Bids will be received until Sept. 14. Bids will also be received same time and place for constructing a 48-in. pipe culvert in Hopewell Township.

MERCER, PA.—Bids are asked by the County Commissioners of Mercer County, John A. McGrath, Clk., until 10.30 a. m., Sept. 3, for the construction of a reinforced-concrete arch bridge over Saul's Run, and bids until the same time for the construction of the abutments for the new bridge on the Middlesex and Pulaski road in Shenango Township.

PITTSBURG, PA.—The County Commissioners have awarded contract for filling approach to bridge No. 1, over Allegheny River, to JAMES H. McQUADE CO., Conestoga Bldg., Pittsburg, at $8,754.

*VIRGINSVILLE, PA.—We are officially advised that bids were received by A. L. Rhoads, County Controller, on Aug. 19, for the erection of a 2-span steel girder bridge with reinforced-concrete floor and macadam roadway over the Maidencreek at Virginsville. Contract was awarded to the NELSON-MERYDITH CO., Chambersburg, Pa., at $8,125.

TOWSON, MD.—McNAUL & DRURY, York, Pa., have secured contract at $10,688, for constructing reniforced-concrete arch for county, bids for which were opened on Aug. 12. Two 50-ft. span arches, 24 ft. in clear, including 4-ft. sidewalk between railways, wings, complete, ready for use, 110-ft. retaining wall, about 8 ft. high, and 4,200 cu. yds. of filling.

LAURAY, VA.—Bids will be received until Aug. 28 by P. St. J. Wilson, State Highway Comr., Richmond, for constructing two steel bridges over Shenandoah River in Page County, to be 546 ft. and 577 ft. in length, respectively.

MONTEREY, VA.—Bids will be received by P. St. J. Wilson, State Highway Comr., Richmond, until noon, Aug. 28, for constructing two steel bridges in Highland County, to be 70 and 150 ft. in length, respectively.

JACKSONVILLE, FLA.—Bids are asked by the Duval County Commissioners until Sept. 10 for a steel bridge over Julington Creek on St. Augustine Road, brick or cement paving on bridge, 100 × 18 ft., single span.

GREENVILLE, MISS.—Bids are asked by Washington County until Sept. 6 for a steel or wire cable bridge across Bogue Phalis, near Norris Ferry. W. W. Miller is Clk.

HAZELHURST, MISS.—The Board of Supervisors have rejected all bids for the construction of a steel bridge over Pearl River. New bids will be asked in September.

WEST POINT, MISS.—Bids are asked by Clay County until Sept. 6 for constructing four bridges. L. J. Howard is Clk. Comrs.

MARYVILLE, TENN. — ARTHUR T. WARDREP, Knoxville, Tenn., has secured contract to construct five reinforced-concrete bridges in Blount County.

HIGH BRIDGE, KY.—The Cincinnati Southern R. R. on Aug. 16 awarded contract to OLIVER BROS. and HUNNICUTT, of Knoxville, Tenn., to remove 200,000 cu. yds. of earth in preparation for the construction of a new bridge over the Kentucky River at High Bridge. The new bridge will be 306 ft. above low-water mark. Estimated cost, $125,000.

OLIVERSBURG, OHIO.—Bids will be received by the Board of County Commissioners, Oliversburg, until Sept. 7, for constructing a 72-ft. concrete bridge over Whetstone Creek at Oliversburg. George H. Weidner is County Audr.

CINCINNATI, OHIO.—Bids will be received until Aug. 27 by the Board of County Commissioners, Fred Dreihs, Clk., for constructing a bridge over the Remlin road, Green Township.

YOUNGSTOWN, OHIO.—Bids for the construction of the Spring Common viaduct were opened by the Board of Public Service on Aug. 17. The low bidder for the structural work of the bridge was the Capitol Construction Co., of Cleveland. This concern bid to put up the track span for $22,981, the river span for $35,070 without buckle-plate floor or $37,850 with buckle-plates. The Youngstown Construction Co. was low bidder on the temporary bridge, at $4,933.

BARBERTON, OHIO.—Bids are asked by the County Commissioners, Charles L. Wirth, Clk., Barberton, until 11 a. m., Sept. 13, for the construction of two steel bridges, one to be known as the McNamara bridge and the other as the Brady Ave. bridge. The contract will include the substructure and the superstructure, as well as all excavating, grading, filling, etc.

JOLIET, ILL.—Bids will be received about Sept. 15 by Arthur Montzheimer, Engr., Joliet, for constructing 180-ft. span concrete and steel viaduct at Jackson St. for the Elgin, Joliet & Eastern Ry. Co. A. F. Banks, Pres., 164 Dearborn St., Chicago. Estimated cost, $60,000.

STREATOR, ILL.—Bids will be received by John B. Patterson, City Clk., until Sept. 6, for erecting a reinforced-concrete bridge over the Vermilion River at Bridge St.

*CHICAGO, ILL.—Bids are asked by the Board of Trustees of the Sanitary District of Chicago until noon, Sept. 8, for the erection of highway bridges. For details see advertisement in this issue. I. J. Bryan is Clk.

Contract for reconstructing bridge across the west fork of the south branch of the Chicago River, at Kedzie Ave., including approaches, bids opened on Aug. 9, has been awarded to GEO. P. CULLEN, 78 La Salle St., at $6,226.

WAUSAU, WIS.—A. F. McGILLIS, of Menominee, Mich., has secured the contract, it is reported, for constructing the Leahy & Beebe bridge, on Bridge St., at about $5,000.

COUNCIL BLUFFS, IOWA.—Bids will be received until Sept. 6 for concrete arch at Eighth St., and concrete slab and girder bridge at Benton St. Estimated cost, $16,000. A. W. Casady is City Clk.

PELLA, IOWA.—The IOWA BRIDGE CO., of Des Moines, Iowa, has been awarded contract for rebuilding the old Pella bridge aver the Des Moines River. Estimated cost, $10,000. Four new steel spans will be put in over the main channel of the stream, covering a distance of 450 ft.; also two spans of the old bridge, each 100 ft. in length, will be rebuilt.

FORT LEAVENWORTH, KAN.—The Kansas City Western R. R. Co. awarded contract on Aug. 10 for constructing a steel and concrete viaduct over Two-Mile Creek here to the LEAVENWORTH BRIDGE CO., of Leavenworth, at about $20,000.

ASPERMONT, TEX.—Stonewall County has voted $30,000 of bridge and road bonds.

MABTON, WASH.—The INTERNATIONAL CONTRACT CO., New York Block, Seattle, Wash., has secured the contract for constructing a 120-ft. and a 100-ft. combination span, at $3,235, and a 180-ft. steel span for $4,289; also four concrete piers at $16.80 per cu. yd. Bids were opened on Aug. 6.

UMATILLA RESERVATION, ORE.—Bids are asked by F. H. Abbott, Acting Comr. of Indian Affairs, Washington, D. C., until 2 p. m., September 23, for constructing a bridge on the Umatilla Reservation. For further information apply to Edward L. Swartzlander, Supt., Pendleton, Ore.

OAKLAND, CAL.—The Board of Public Works has awarded to J. T. SORENSON the contract to erect a reinforced-concrete culvert over the Glen Echo Creek, at Grand Ave. Estimated cost, $7,241. Walter B. Fawcett is Secy. Bd.

*GREEN RIVER, UTAH.—Bids for constructing a bridge across Green River at Green River will be received until 10 a. m., Sept. 11, by the Boards of County Commissioners of Grand and Emery Counties. Mark Tuttle is Secy. Joint Bd.

WINNIPEG, MAN.—S. C. HILL & CO., of this city, have received the contract for building all the bridges along the Calgary-Tofield branch. The contract includes a 3,000-ft. and also an 800-ft. structure, both 150 ft. high.

DUHAMEL, ALTA.—The Grand Trunk Pacific Ry. Co. is having plans prepared for a bridge to be erected here which will be of steel construction on concrete abutments, 3,000 ft. long and 100 ft. high.

EDMONTON, ALTA.—CHARLES MAY, of this city, has been awarded contract for the construction of the Grand Trunk Pacific Ry. bridge over the McLeod River. The entire structure will cost about $275,000.

## BUILDINGS.

*MANCHESTER, N. H.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Oct. 5, for construction (complete) of the U. S. post-office and court-house at Manchester.

*WOONSOCKET, R. I.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Sept. 28, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Woonsocket.

NEW YORK, N. Y.—Bids are asked until 10.30 a. m., Sept. 7, by Nicholas J. Hayes, Fire Comr., for furnishing all the labor and materials required for repairs to quarters of Engine Company 140, located on Prospect Ave., near Greenwood Ave., Boro. of Brooklyn.

Bids are asked by Bird S. Coler, Pres. Boro. of Brooklyn, until 11 a. m., Sept. 8, for furnishing all the labor and materials necessary to reline and reset brick setting of three boilers, etc., Municipal Building, Boro. of Brooklyn.

NEW YORK, N. Y.—Bids are asked until 10 a. m., Sept. 7, by William F. Baker, Police Comr., for completing contract executed by New York Steam Fitting Co., Feb. 18, 1905, which was declared abandoned, for furnishing all the labor and furnishing and erecting all the materials necessary to install the heating and ventilating system, boilers and steam piping in the new building to be erected on the block bounded by Grand, Centre and Broome Sts. and Centre Market Pl., Boro. of Manhattan, for headquarters for the Police Department of the City of New York.

HUDSON, N. Y.—James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., has awarded to WILLIAM F. HOLDING, 2426 Davidson Ave., New York, contract for construction of post-office building at Fourth and Union Sts., 49 × 91 ft., one story, of marble, granite and brick, fireproof. It is to cost, with granolithic walk approaches and concrete walls with granite coping, $54,800.

BINGHAMTON, N. Y.—The bids received on Aug. 18 by the State Commission in Lunacy at Albany, for the construction of new steam and return piping and for rebuilding the trestle at the Binghamton State Hospital, Binghamton, N. Y., were: The R. T. Ford Co., Rochester, N. Y., $28,800; Runyon & Ogden, Binghamton, N. Y., $33,565; H. C. Peterson & Co., Utica, N. Y., $24,738; Lynch & Woodward, Boston, Mass., $37,656. For extension of water supply system at same institution: Rocco Pirreta & Co., 39 Kossuth St., Utica, N. Y., $2,550; Gaylord & Eitapens, Binghamton, N. Y., $2,459; The R. T. Ford Co., Rochester, N. Y., $2,441. T. E. McGarr is Secy. of Comn.; F. B. Ware is State Arch., Albany.

ALBANY, N. Y.—The general contract has been let to THE BUNTING-BULL CO., 1 Madison Ave., New York, and 402 Fidelity Bldg., Buffalo, for construction of a fireproof theater building, 76 × 125 ft., three stories high, of terra cotta, brick, concrete, steel and stucco. It is to be erected at Clinton Ave. and Pearl St. for H. R. Jacobs, Mgr. Cost, $60,000. A. W. Johnson, 710 Spitzer Bldg., Toledo, Ohio, is Arch.

MONTICELLO, N. Y.—A Masonic Hall is to be erected here by the F. and A. M., of Monticello, to replace the hall recently destroyed by fire. Charles S. Starr is Chn. of the Bldg. Com. The architect has not yet been selected.

BUFFALO, N. Y.—We are officially advised that the Co-operative Amusement Co., Dr. J. Grafton Jones, Pres., 473 Virginia St., will build a 1-story and gallery theater, 55 × 135 ft., of pressed brick and terra cotta, at 523 William St. Cost, $41,000. Henry L. Spann, 413 West Delavan Ave., Arch. The general contract has been let to METZ BROS., 1295 Fillmore Ave., Buffalo, N. Y.

CHARLES BERRICKS SONS, 1151 Main St., have been awarded contract for erection of a bowling alley building, 40 × 120 ft., two stories and basement, of brick and steel (to contain twelve alleys) which will be erected at Goodall and Washington Sts., Buffalo, by C. P. Ament & Bro., 57 State St., Rochester. Bethune, Bethune & Fuchs, 215 Franklin St., Buffalo, are Archs.

Contract has been awarded to MOSIER & SUMMERS, 1266 Seneca St., for the erection of a Mother House for the Sisters of Mercy at Abbott Road, Red Jacket Parkway and Choate Ave., from plans of Sidney F. Heckert, Arch., 341 Sixth Ave., Pittsburg, Pa. The building will be of stone, brick and structural steel construction, to cost, with chapel, $250,000. Rt. Rev. Charles H. Colton, 1025 Delaware Ave., is Bishop.

ROCHESTER, N. Y.—Frederick Gleason, 31 Appleton St., is low bidder for the tuberculosis hospital building, 35 × 57 ft., two stories, with two wings, each 53 × 87 ft., of brick, which the city of Rochester is to erect on the Municipal Hospital grounds on Waring Road. Crandall & Strobel, 401 E. & B. Bldg., Rochester, are Archs.

ELMIRA, N. Y.—The B. P. O. Elks, Judge George S. McCann, Chn. Bldg. Com., 452 West Church St., has let general contract for a 3-story clubhouse, 60 × 72 ft., to JOHN C. WILLIAMSON, 756 Baldwin St., at about $50,000. J. H. Considine, Robinson Block, is Arch.

COLLINGSWOOD, N. J.—The issue of $50,000 bonds for three schoolhouses has been sold. The Board of Education has awarded the contract for the buildings to J. STEELMAN, of Bridgeton, N. J.

PHILADELPHIA, PA.—The William Steele & Sons Co., 1600 Arch St., has posted plans for estimates on a 6-story and basement building in the rear of the building of the P. Blackston & Sons Co., 1012 Walnut St., for that company. The new structure, which will be of brick and reinforced concrete, 43 ft. 6 ins. × 78 ft. 2 ins., will be built at the southwest corner of Warnock and Chancellor Sts., and will cost about $75,000.

Plans are being prepared by F. Russell Stuckert, Arch., 1421 Chestnut St., for the erection of a 2-story garage and restaurant building at 242-48 North Broad St., for the Horn & Hardart Baking Co. The building will measure 75 × 180 ft., and will occupy the site of the property just purchased from the Roberts estate for $180,000.

Another garage to be erected in the vicinity will be built at the southwest corner of Broad and Callowhill Sts. for Samuel Sternberger, from plans by Sauer & Hahn, Archs., 1112 Chestnut St. It will measure 35 × 110 ft.

READING, PA.—Samuel G. Silberman and James A. Wood have concluded negotiations for financing the erection of a 9-story hotel to be built at the northeast corner of Fifth and Washington Sts., Reading, for the Reading Hotel Co. Henry Blauvelt, Mariner & Merchant Bldg., is Arch. The building will cost $400,000.

*WASHINGTON, D. C.—Bids are asked by Jesse E. Wilson, Acting Secy., Dept. of the Interior, Washington, until 2 p. m., Sept. 15, for the construction of a Science Hall at the Howard University, Washington, D. C.

WASHINGTON, D. C.—One bid was received on Aug. 21 by the Chief of the Bureau of Yards and Docks, Navy Dept., Washington, for improvements to Building No. 41, at the Washington Navy Yard, viz., that of the PENN BRIDGE CO., Beaver Falls, Pa.

ROANOKE, VA.—The contract for building the Roanoke post-office has been awarded by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., to JONES & ADAMS, of Lynchburg, their bid being $82,297. Time, Sept. 1, 1910.

MORGANTOWN, W. VA.—Bids are asked by the State Board of Control, Charleston, W. Va., until noon, Sept. 2, for the following work to be done at the University of Morgantown: Flooring, fitting up and finishing the north basement room in Science Hall; the construction of a third story on the north wing of Science Hall; the construction of a 3-story wing to Woodburn Hall. Elmer Jacobs is Arch.

OWENSBORO, KY.—Final award has been made by James Knox Taylor, Superv. Arch. of the Treasury Dept., Washington, D. C., for the construction of a post-office building at Owensboro, Ky., to HARRY A. BISHOP, Commercial National Bank Bldg., Chicago, Ill., at a total of $139,532. Time, Jan. 11, 1911.

COLUMBUS, OHIO.—Bids are asked until 2 p. m., Sept. 10, by the Board of Managers of the Ohio Penitentiary for constructing one block of 150 steel cells, complete with foundation work and sewer installation for an additional 150 cells; a brick power-house; a water softening plant; a radial brick chimney, and four water tube boilers, all to be in accordance with the plans and specifications prepared by Marriott & Allen, Archs., 20 East Broad St., Columbus, and The Osborn Engineering Co., Engrs., Osborn Bldg., Cleveland, Ohio.

LONDON, IND.—Bids are asked by George H. P. Fritts, Trustee of Moral Township, Shelby County, until noon, Sept. 7, for installation of a steam heating plant and ventilating system in the 8-room school building near London.

INDIANAPOLIS, IND.—Bids will be received by the School Board until 1 p. m., Sept. 3, for the erection complete of a branch library building at Mount and Alice Sts. D. A. Bohlen is Arch.

Bids are being asked by the National Malleable Casting Co. for erection of a 4-story office building at 546 Holmes Ave. The structure will be of brick and stone.

INDIANAPOLIS, IND.—Bids are asked by the School Board until 8 p. m., Aug. 31, for the installation complete of a steam heating plant in School No. 54 and in Special No. 49. John E. Cleland is Business Dir.

Bids are asked by John E. Cleland, Business Dir., Bd. of School Comrs., until 1 p. m., Sept. 3, for the erection and installation complete of a steam heating plant in the addition to School No. 35, corner of Madison Ave. and Raymond St. Vonnegut & Bohn are Archs., Indiana Trust Bldg.

CHICAGO, ILL.—According to press reports the old Union station in Chicago will be replaced by a $25,000,000 structure. The new building will be erected alongside the $20,000,000 terminal which the Chicago & Northwestern R. R. Co. is building. The railroads planning the project are the Pennsylvania, owner of the present station; the Chicago & Alton, the Chicago, Milwaukee & St. Paul, and the Chicago, Burlington & Quincy, tenants of the present building.

A modern $30,000,000 terminal at State and Twelfth Sts. is under consideration by officers of the Chicago & Western Indiana R. R. Co. This terminal would replace the Polk St. station, which is used by the Wabash, the Erie, the Atchison, Topeka & Santa Fe, the Chicago, Indianapolis & Louisville, the Grand Trunk and other railroads.

MADISON, WIS.—We are officially advised that the Regents of the University of Wisconsin have awarded the contract for concrete tunnels to N. QUINN, of Madison, Wis., and for the installation of steam piping in the tunnels to the MUELLER CO., of Milwaukee, Wis. No contracts have been awarded for boilers, stokers, smoke breeching or air compressors. M. E. McCaffrey is Secy.

FORT SNELLING, MINN.—Bids are asked by Capt. R. C. Croxton, Constr. Q. M., Army Bldg., St. Paul, Minn., until 11 a. m., Aug. 27, for construction, plumbing, heating, electric wiring, and electric fixtures for four officers' quarters; construction, plumbing, electric wiring, and electric fixtures for Q. M. stables and an addition to artillery stable at Fort Snelling, Minn.

CLOQUET, MINN.—Plans are being prepared by Alban & Fisher, Archs., of St. Paul, Minn., for the construction of a pressed brick and cut stone Roman Catholic church here. It will have steam heating, electric lighting and seat about 850. Cost, $40,000.

ST. PAUL, MINN.—Bids are asked by the State Board of Control, P. M. Ringdal, Chn., until noon, Sept. 13, for the general construction of a cottage for men at the Hastings (Minn.) State Asylum. Appropriation

is $55,000. C. H. Johnston, Manhattan Bldg., St. Paul, is Arch. The same board will receive bids for a $50,000 2-story cottage at the Anoka (Minn.) State Asylum on Sept. 13, also designed by C. H. Johnston. Both buildings will have steam heating, electric lighting and be strictly fireproof.

The contract for the general construction of the Cleveland High School has been awarded to INGEMANN BROS., 1930 St. Anthony Ave., St. Paul, their bid being $111,-480. HANKE & EHA, city, have been awarded the heating at $14,265; HEALY PLUMBING & HEATING CO., city, received the plumbing at $7,330, and the electric work was awarded to UNITY ELECTRIC CO., city, at $2,085. D. W. Lawler is Mayor and C. W. Gordon, Pres. of Bd. of School Inspectors.

*FORT YELLOWSTONE, WYO.—Bids are asked by Lieut. G. C. Smith, Constr. Q. M., until 2 p. m., Sept. 7, for constructing, plumbing, heating and electric wiring hospital building.

GREAT FALLS, MONT.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Sept. 29, for the construction (including plumbing, gas piping, heating and ventilating apparatus, electric conduits and wiring and standard clock system), of the U. S. post-office and court-house at Great Falls.

*DENISON, TEX.—Bids are asked by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until 3 p. m., Oct. 1, for construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of U. S. post-office at Denison.

BOULDER, COLO.—It is stated that within the next year about $500,000 worth of buildings will have been completed or will be under construction on the University of Colorado campus, at Boulder, a result brought about by the donations of the late A. J. Macky, Senator Guggenheim and appropriations by the last general assembly. First will be built the Macky auditorium, for which it is probable upward of $300,000 will be available.

PUEBLO, COLO.—SCHLESINGER & HARLAN, 17 W. Huerfano St., Colorado Springs, have been awarded a contract at Pueblo involving $142,657. The contract is for the construction of three cottages at the State Insane Asylum, the plans for one of which were made by Thomas B. Barber, of Colorado Springs. The cottages are approximately 90 × 150 ft. in size, and three stories high, including a basement. Each will accommodate 100 persons. Work will be begun at once. S. Schlesinger will have charge.

DENVER, COLO.—The Lookout Mountain Park Development Co., with a capitalization of $500,000, has been incorporated, for the purpose of making a mountain resort of Lookout Mountain Park. A hotel is planned.

SANTA FE., N. M.—The De Vargas Hotel Co. has incorporated with a capital of $500,-000 and expects to build a hotel. The directors are John P. Wagner, M. A. Otero and George W. Prichard, all of Santa Fe.

SEATTLE, WASH.—Plans are being made by the management of the Seattle College, a Roman Catholic school for boys, to erect a school to cost $500,000.

Bids will be called for soon by the West Lake Improvement Co. for the construction of a 4-story building to cost from $60,000 to $65,000.

TACOMA, WASH.—H. C. Nutt, Gen. Mgr. of the Northern Pacific Ry. Co., west of Trout Lake, Mont., has announced that the company will begin work immediately on a $750,000 depot here.

West & Wheeler, of Seattle, will erect a 3-story store and hotel building here, to cost about $41,500. Potter & Merrill, of Tacoma, Architects.

A 4-story brick block is to be erected in Tacoma by Mrs. Emma Saterlee at 1324-26 Pacific Ave. Plans are being prepared by Heath & Twichell, Archs., Fidelity Bldg. The cost is about $40,000.

ASTORIA, ORE.—Announcement has been made that an office and store building, three stories in height, is to be erected by A. G. Spoxarth and T. Bracker at an approximate cost of $40,000.

PORTLAND, ORE.—On Eleventh and Hall Sts., the Dammeier Investment Co. is to erect a 4- or 5-story apartment building, to cost $50,000.

FOREST GROVE, ORE.—The Pacific University is taking steps toward raising $300,-000 to be used in building improvements. H. W. Scott, of Portland, Ore., is Pres. of the Board of Trustees.

SAN FRANCISCO, CAL.—Arthur J. Laib, Arch., has completed plans and specifications for a 4-story store and loft building to be built by M. J. Brandenstein, at a cost of about $65,000.

IMPERIAL, CAL.—The bids opened by Imperial Valley Union High School Trustees for construction of main high school building are as follows: C. F. McDonald, $54,800; Dan Rice & Co., $46,945; without plumbing and heating equipment; H. H. Peterson, $43,330, complete; Frank Koetsch, carpenter and mill work, steel ceiling and hardware, $17,524; E. S. Erskine, painting, $2,165; J. L. Travers, $44,200, building complete; Collins & Dee, tin and galvanized iron work, $1,200; E. A. Nelson, wiring, $575; Machinery & Electrical Co., heating and ventilating, $2,998; Witman & Maxwell, plumbing, $2,377; same, steam heating, $2,-780; Charles B. Stephens, plumbing, $3,150; W. A. Edgar, excavating, $475; Reams & Turbett, plastering, $2,844, and Lattell & Fischer, painting, $2,175.

RENO, NEV.—A ward building is to be erected on the grounds of the Nevada Hospital for Mental Diseases at Reno. Plans and specifications are on file with the Board of Commissioners at Carson City, the Superintendent of the hospital at Reno, and from F. J. De Lonhart, Arch., Reno. The appropriation is $40,000.

NAMPA, IDAHO.—The City Council has accepted the plans for the proposed city hall to cost $50,000. The plans were drawn by Wayland & Fennell, of Boise, Idaho.

PORT ARTHUR, ONT.—The contract for the construction of the Canadian Northern Hotel here has been let to the IMPERIAL CONSTRUCTION CO., of Toronto. Cost, $260,000.

PRINCE ALBERT, SASK.—The contract for the construction of the Masonic Temple here has been let to A. ANDERSON, of this city, at $60,000. The Merchants Bank of Canada will occupy a portion of the ground floor, the rest being stores.

SASKATOON, SASK.—We are officially advised that the following bids were received on Aug. 7 by the Saskatoon Collegiate Institute, William P. Bare, Secy., for constructing collegiate building here: Brandon Construction Co., $93,669; Carson Quarries Co., $92,945; Sam'l Brown, Winnipeg, $92,-870; Mooers & Wells, Saskatoon, $91,650; Neil Stuart, Saskatoon, $89,497; Smith Bros. & Wilson, Regina, $87,500. The contract has been let to the SASKATCHEWAN BUILDING & CONSTRUCTION CO., of Regina, Sask., A. A. Godwin, Mgr., Box 818 Regina, or care of Empire Hotel, Saskatoon, at $84,555. This is exclusive of any fireproofing, temperature regulation or air washing plant, which, if installed, will be extras.

## WATER SUPPLY—IRRIGATION.

(* *denotes that this work is advertised in Engineering News.*)

*NEW BEDFORD, MASS.—We are officially advised that bids were opened as follows on Aug. 17 by the Water Board for furnishing c.-i. water pipe and special castings: Warren Foundry & Machine Co., Phillipsburg, N. J., Schedule A, 5,903 tons pipe, at $23 per ton, $135,769; 220 tons special castings, at $47.50, $10,450; total, $146,-219; Schedule B, 610 tons pipe at $24.50, $14,945; 20 tons special castings at $50 per ton, $1,000, total $15,945; grand total, $162,-164. U. S. Cast-Iron Pipe & Foundry Co., 71 B'way, N. Y.: Schedule A, 5,903 tons special $23.20 per ton, $136,950, 220 tons special castings, $47.20 per ton, $10,340, total $147,-290; Schedule B, 610 tons pipe, $23.20 per ton $14,152, 20 tons special castings, $47 per ton, $940; total $15,092; grand total, $162,382. Florence Iron Foundry, Florence, N. J., Schedule A, 5,903 tons pipe, $25.10 per ton, $148,165, 220 tons special castings, $55 per ton, $12,100, total $160,265; Schedule B, 610 tons pipe, $25.10 per ton, $15,-311, 20 tons special castings, $55 per ton, $1,100, total $16,411; grand total, $176,676. Standard Cast-Iron Pipe & Foundry Co., Bristol, Pa., Schedule A, no bid on 36-in. and 30-in pipe. Total bid on remainder of the pipe at $23.15 and $23.30 per ton, and special castings at $46 per ton, $19,921; Schedule B, 610 tons pipe, $23.15 per ton, $14,121; 20 tons special castings, $46 per ton, $920; total, $15,041. Russell Wheel & Foundry Co., Detroit, Mich., Schedule A, no bid on pipe, 220 tons special castings at $62 per ton, $13,640; Schedule B, 20 tons special castings, $60 per ton, $1,200.

Contracts have been awarded to the WARREN FOUNDRY & MACHINE CO. for Schedule A at $146,219, and to Standard Cast-Iron Pipe & Foundry Co. for Schedule B at $15,041.

NORTH ATTLEBORO, MASS.—TRUMBULL & CO., of Boston, have been awarded contract for constructing filter beds here at $28,137.

*GARDNER, MASS.—Contract for constructing foundations for standpipe and laying c.-i. water pipe at the Gardner State Colony, Gardner, has been awarded to JOHN E. PALMER, Old South Bldg., Boston. Contract for constructing and erecting steel standpipe will be awarded Aug. 27.

*NEW BRITAIN, CONN.—We are officially advised that bids were received by the Board of Water Commissioners as follows on Aug. 17 for the construction of an earth concrete dam in the town of Burlington: Holbrook, Cabot & Rollins, Boston, Mass., $89,160; Pierson Engineering & Construction Co., Bristol, Conn., $70,160; Michael Little Co., Boston, $78,508; J. J. Falvey Co., Boston, $89,470; Suzzio & Di Nonni, New Britain, $81,121; Edward Tracey, Derby, Conn., $75,-428; Jas. D. Kelley, Boston, $74,684; Bunting, Bull & Co., New York, $73,095.

PAINTED POST, N. Y.—Bids will be received by the Village Board, A. D. Stevens, Chn., for a system of water supply, including reservoir, electric pumping station, etc., from plans prepared by Knight & Hopkins, Engrs, Rome, N. Y.

MARCELLUS, N. Y.—The Board of Village Trustees, Charles E. Jones, Clk., has awarded contract to SAMUEL BONN, 654 Burnett Ave., Syracuse, N. Y., for trenching and laying 7,000 lin. ft. of 6-in. c.-i. pipe and 1,900 lin. ft. 4-in. c.-i. pipe, with pipe for same and ten setting stop valves for water system.

MORRISTOWN, N. Y.—Bids are asked until Sept. 1 by the village for standpipe, pump and gasoline engine for water-works. Estimated cost, $10,000. Frank L. Scott is village Clk.

*NEWBURGH, N. Y.—Bids will be received by the Board of Water Commissioners until 7 p. m., Sept. 13, for raising an earth dam and roadway, building concrete masonry, stone rip-rap walls and slope paving and other work incidental thereto, consisting of about 12,000 cu. yds. earth excavation; 38,000 cu. yds. earth embankment; 3,450 cu. yds. puddle wall; 4,250 cu. yds. broken stone lining; 11,000 sq. yds. slope paving; 1,850 cu. yds. rip-rap walls; 500 cu. yds. concrete masonry and other work. Curtis Stanton is Supt.

DOYLESTOWN, PA.—Bids are asked by the Town Council until Sept. 1 for the construction of a reinforced concrete reservoir. A. Harry Clayton is Clk.

*DOYLESTOWN, PA.—Bids are asked by A. Harry Clayton, Boro. Clk., until 8 p. m., Sept. 9, for relining, elevating and covering the present reservoir with steel reinforced concrete.

WINDBER, PA.—The Berwind-White Co. is reported to be preparing plans for enlarging the new reservoir on Upper Shade Creek.

WASHINGTON, PA. — William Wylie, Engr., of Washington, has completed surveys, it is reported, for a pipe line to be constructed between Washington and Canonsburg, a distance of 6.44 miles, to furnish these cities and all the towns lying in between with filtered water.

*WASHINGTON, D. C.—The Commissioners of the District of Columbia have awarded contract for furnishing 200 fire hydrants for the District Fire Department to the GLAMORGAN PIPE & FOUNDRY CO., Lynchburg, Va., at $34.20 each. Bids were opened on Aug. 7. List of bidders noted on Aug. 12.

*CHRISTIANSBURG, VA.—Bids are asked by John R. Johnson, Chn. Special Water Com., until 8 p. m., Sept. 8, for furnishing f, o, b, cars at Christiansburg, about six miles of c.-i. pumping and distributing mains of 10, 8, 6 and 4 ins. and other diameters, with corresponding quantities of special castings and valves, and about 46 fire-hydrants. Specifications may be obtained by applying to Howard Murphy, Engr., Christiansburg.

RICHMOND, VA.—Bids will be received by E. E. Davis, Supt. Water-Works, until 4 p. m., Sept. 14, for the following supplies: Gate valves, c.-i. pipe, special castings, double nozzle fire hydrants, valve boxes, pig lead, wiping solder and brass work.

WHEELING, W. VA.—The Board of Control awarded contract on Aug 13 at $40,000 to the ALLIS-CHALMERS CO., Milwaukee, Wis., for the installation of a 20,000,000-gallon pump at $140,000. J Richard Kornmer is Engr., House Bldg., Pittsburg, Pa.

*HIGH POINT, N. C.—Bids will be received by the Mayor and Council until 2 p. m., Sept. 15, for building a reinforced-concrete coagulating basin, a 1,000,000-gallon filter plant, clear water basin, and accessories, laying 1,600 ft. of sewer pipe and building a concrete septic tank. Gilbert C. White is Engr., Durham, N. C.

CHESTER, S. C.—W. B. CAMPBELL, Chester, has received contract for excavating and hauling away earth from clear water and settling basin the city will construct on West End. The machinery for the new plant will be installed about Nov. 1.

*PERRY, GA.—We are officially advised that contract for the construction of water-works here was awarded on Aug. 18 to the GENERAL CONTRACTING & CONSTRUCTION CO., of Atlanta, Ga., at $14,517. Hazelhurst & Andersons are Engrs., Atlanta.

*MARIETTA, GA.—Bids will be received by the Board of Water Commissioners until 8 p. m., Sept. 20, for furnishing all materials, machinery and constructing a system of water-works. J. B. McCrary & Co., Empire Bldg., Atlanta, Ga., are Engrs.

PRATT CITY, ALA.—The city has voted $15,000 of bonds for the construction of water-works.

BIRMINGHAM, ALA.—The Birmingham Water, Light & Power Co., incorporated with $20,000 capital stock by Charles E. Glover, S. W. Hawkins and T. H. Friel, all of North Birmingham, Ala., proposes to construct a dam or system of dams at various points on Black Warrior River and will operate in Birmingham, North Birmingham, Bessemer, Ensley, East Lake, Woodlawn and other cities.

MACON, MISS.—Bids are asked by the city until Sept. 8 for remodeling the water-works and electric light plant. Estimated cost, $20,000.

JOHNSON CITY, TENN.—Plans for a municipal gravity system of water-works are now being prepared by W. M. Dunlap, City Engr., and Walter G. Kirkpatrick, Consulting Engr., of Jackson, Miss. The supply will come from springs. Conduit will be 13 miles in length and there will be a distributing reservoir and distributing mains.

EAST LIVERPOOL, OHIO.—Bids were opened by the Board of Public Service, A. S. Hughes, Clk., on Aug. 13 for furnishing material and constructing a system of mechanical filters, reinforced concrete subsiding basin, laying c.-i. water pipe, etc., as follows: Rheinhart Bros., East Liverpool, $62,626; Sand & Gravel Co., East Liverpool, $63,815. John W. Hill, 506 First National Bank Bldg., is Engr., Cincinnati.

MADISON, IND.—The City Council will ask for bids for the improvement of the city water plant, including the sinking of from two to eight new wells.

MANISTEE, MICH.—John W. Alvord, Chicago, Ill., has been selected to examine the water system and prepare plans for improvement and extension.

ANTIOCH, ILL.—Contract for 8,000 ft. of 6-in. water main, bids opened on Aug. 11, has been awarded by the Board of Local Improvements to WILLIAM DAVIDSON, of Wilmette, at $6,680. M. R. Miller, of Waukegan, is Engr.

CHICAGO, ILL.—Bids will be received until Aug. 28 by John J. Hanberg, Comr. Pub. Wks., for furnishing material and constructing foundations for boiler room at Roseland pumping station, 104th St. and Stewart Ave.

Bids will be received until Aug. 27 by the Board of Inspectors House of Correction, 26th St. and California Ave., for furnishing material and installing an automatic electric compression water system for the new men's cell house at the House of Correction.

ROCK ISLAND, ILL.—Bids will be received by the city until Sept. 30 for constructing a 6,000,000-gallon sedimentation and filter plant. Walla[illegible]reichler is City Engr.

*SOUTH MILWAUKE[illegible] WIS.—Bids are asked by the city until [illegible] p. m., Sept. 7, for furnishing and ins[illegible]g a filtering plant of 1,000,000 gallon[illegible]r day capacity, bidders being asked to [illegible]mit a separate bid on a plant of 1,500,[illegible] gallons per day capacity, with provision[illegible] increase same if found necessary. C[illegible]ete plans and specifications must acco[illegible]y bids, no allowance for same to be [illegible] by the city in case bids are rejected. [illegible]rs must agree to employ local help whe[illegible]r possible. Bids on both pressure and gr[illegible]y systems are solicited. William G. O[illegible] is City Clk.

EARLHAM, IOWA.—T[illegible] Town Council has let contract for th[illegible] water-works and the electric lighting pla[illegible] to JOSEPH A. BORTENLANGER, of O[illegible]a, at $16,6[illegible]. The alternating system o[illegible]ghting and the pressure system for wa[illegible] were adopted. The entire work is to be [illegible]mpleted by December 1..

BIWABIK, MINN.—Bids will be received by the Village Council until Aug. 28 for constructing a 125,000-gallon water-tank and 500-ft. tower.

VALLEY, NEB.—The city has voted to issue $12,000 of bonds for installing water-works and $5,000 of bonds for electric lights.

DICKINSON, N. DAK.—The DICKINSON HEATING & PLUMBING CO., of Dickinson, has secured contract for water extensions here at $6,250. Bids were opened on Aug. 2[illegible] A. J. Osborn is City Audr.

GLASGOW, MONT.—JAMES KENNEDY, of Fargo, N. Dak., has been awarded contract by the city for constructing water-works, bids opened on Aug. 11, at $53,78[illegible]. E. S. Severence is City Engr.

CARTHAGE, MO.—Bids will be received until 8 p. m., Sept. 3, by the Board Public Works for the construction of a concrete reservoir for the city. Plans on file with W. A. Turner, Secy. M. A. Earl & Co., Carthage, are Consulting Engrs.

QUANAH, TEX.—The city has voted to issue $30,000 of additional water-works bonds.

RALSTON, OKLA.—The city has voted to issue $25,000 of bonds for installing water-works and electric lights.

LAMAR, COLO.—SPICER & BALDWIN, contractors, of Colorado Springs, were awarded contract on Aug. 11 by the city for laying ten miles of water pipe and other work on the new Lamar water system, at $29,000. MANVILLE & SILLON, of Lamar, were awarded contract for building a 4,000,-000-gallon reservoir at $19,500. The water system will cost $130,000 when complete.

*LAMAR, COLO.—Bids are asked until noon, Sept. 5, by the Two Buttes Irrigation & Reservoir Co., Lamar, for construction of an earth filled dam with concrete or puddled core, tunnels, outlet works, main canal and distributing system. Contents of dam approximately 400,000 cu. yds., height of dam 106 ft., main canal and laterals 350,000 cu. yds. of earth, 30,000 cu. yds. of rock and 2,700 lin. ft, 7-ft. wood pipe.

SUNNYSIDE, WASH.—We are officially advised that bids were opened on July 30 by the U. S. Reclamation Service as follows for the construction of the Sulphur Creek wasteway, Yakima project, Washington, Specification No. 158: Strange & McGuire, Sale Lake City, Utah, $28,317; Chamberlin Construction Co., Seattle, Wash., $31,547; International Contract Co., New York Block, Seattle, $37,507; T. M. Bruce & Co., Pacific Block, Seattle, $30,493; George Cook & Son, Minneapolis, Minn., $26,248.

WESTON, ORE.—The city has voted to issue $25,000 of bonds for installing a water-works system.

PORTLAND, ORE. — Specifications have been completed for the 50,000,000-gallon storage reservoir, to be constructed on Mount Tabor as a preliminary step to the construction of a second pipe line to Bull Run. D. D. Clarke is Ch. Engr., Water Dept.

BOISE, IDAHO.—George S. Parks has filed an application for reservoir purposes embracing 1,888 acres of land along the Jordan Creek in Owyhee County. The capacity of the reservoir will be 130,910 acre ft. with which it is proposed to irrigate a large area of land in eastern Oregon.

REGINA, SASK.—The CANADA IRON CORPORATION, Ltd., of Montreal, Que., has secured the contract for 1,942 tons of c.-i. pipe at $40 per ton, and specials $65 per ton, all f. o. b. cars Regina.

## SEWERAGE.

(* *denotes that this work is advertised in Engineering News.*)

ST. ALBANS, VT.—The City Council on Aug. 14 awarded contract for sewer pipe to the AMERICAN SEWER PIPE CO., Philadelphia, Pa., at $12,559. The contract calls for 2,600 ft. of 36-in. pipe; 100 ft. of 32-in., 65 ft. of 30-in., 50 ft. of 24-in., 5,124 ft. of 20-in., 1,450 ft. of 18-in., 2,220 ft. of 15-in., 4,2[illegible] ft. of 12-in., 4,240 ft. of 10-in., and 1,08[illegible] ft. of 8 in.

MEDFIELD, MASS.—Contract for enlargement of filter beds at the Medfield Insane Asylum is reported to have been awarded to MICHAEL LITTLE & CO., Leominster, at $9,375.

DANIELSON, CONN.—The Petrossi Co., Hartford, is the lowest bidder for the sewer work in contemplation in this borough. There were seven bidders, as follows: The Petrossi Co.; Leonardo Suzio, Meriden; B. F. Mahan, New London; Frank L. Allen, Worcester, Mass.; Eveline Bros., New Britain; Roger Kennedy, Middletown, and Frank A. Davis, Danielson. The prices of the lowest bidder follow: Franklin, Furnace and Dyer Sts., per lin. ft., 20-in. pipe, $1.56; 18-in., $1.55; 15-in., $1.15; 12-in., 88 cts.; 10-in., $1.10; 8-in., $1.05; 20in. iron pipe, $2.30; 12in. iron pipe, $1.25. Trunk line sewer, 20-in. pipe, $1.33; 18-in., $1.55; 15-in., $1.15; 12-

in., 91 cts.; 10-in., $1.10; 8-in., 68 cts.; 20-in. iron pipe, $2.30; 12in., iron pipe, 43 cts.; Y branches, 43 cts.; manholes, $25; rock excavation, $3 per cu. yd.

rock excavation, $3 per cu. yd. and appurtenances in White Plains mfypui

NEW YORK, N. Y.—Bids are asked until 11 a. m., Sept. 7, by Louis F. Haffen, Pres. Bronx Boro., for constructing an outlet sewer and appurtenances in White Plains Road, between East River and East 152d St.; in East 152d St., between White Plains Road and Ave. B; in Ave. B, between East 152d St. and Lafayette Ave., East 156th St., and in Lafayette Ave., between Ave. B and Ave. A.

BROOKLYN, N. Y.—The lowest bid opened on Aug. 18 by Bird S. Coler, Boro. Pres., for the construction of a sewer in Flatbush below Fisk Terrace, was that of Culp & McCauley, of Gravesend Ave., at $121,000.

OLEAN, N. Y.—Bids were opened on Aug. 10 by the Common Council for constructing an outlet sewer about 2.4 miles in length in the Eighth Ward, and for an additional outlet sewer in the First, Fourth and Fifth Wards, in all 1.3 miles in length. Contract has been awarded to KUHN & APPLEGATE at $14,565. Charles Keenan is City Clk.

SYRACUSE, N. Y.—Bids will be received until Sept. 1 by the Syracuse Intercepting Sewer Board, Harry J. Hamlin, Secy., for Contract 7 for furnishing 18 regulating valves.

BINGHAMTON, N. Y.—The Board of Contract and Supply on Aug. 4 awarded contract for the construction of the Main St. storm water sewer to JOHN TYNE, at $6,366.

ELIZABETH, N. J.—Bids will be received until Sept. 1 by the City Council for constructing sewers in Marston St. and Westminster Ave., requiring 2,685 lin. ft., 15, 12 and 10-in. pipe sewer, 2,016 lin. ft. of 6-in. pipe, etc. N. K. Thompson is St. Comr.

The City Council Special Committee on River Improvement has awarded contract for constructing pumping station for the new intercepting sewer, to B. H. BROOKE & CO., 50 Church St., New York, at $12,835.

FREEHOLD, N. J.—Freehold will build an extension to its sewer system and the work may be commenced this fall. Estimated cost, about $30,000. Three new pumping stations will be built to which the sewage can be discharged, and from which it can be pumped to the present sewage farm.

*PHILIPSBURG, PA.—Bids for the reconstruction of 3,500 ft. of 18-in. sewer pipe, the construction of 600 ft. of 18-in. sewer, for the borough will be received by W. A. H. Streamer, Clk. of Council, until 6 p. m., Sept. 7. The work will consist mostly of the relaying of 18-in. pipe on a pile and timber foundation. Plans and specifications may be seen at the office of George H. Ayres, Boro. Engr.

SCRANTON, PA.—The Councils on Aug. 17 awarded contract for the Pike St. sewer to J. J. JONES & CO., at 89 cts. per ft. Other bidders were: Harris & Co., 95 cts. per ft., and J. J. Mannion, $1.16.

CONNELLSVILLE, PA.—Bids are asked by Councils, A. O. Bixler, Clk., until noon, Sept. 7, for the construction of 3,829.8 lin. ft. of vitrified pipe sewers in the South Side. J. B. Hogg is Engr.

*HUNTINGDON, PA.—Bids will be received at the office of the General Superintendent of the Pennsylvania Industrial Reformatory, Huntingdon, until 2 p. m., Sept. 6, for constructing a sewage disposal plant and storm water sewers at the Pennsylvania Industrial Reformatory. T. B. Patton is Gen. Supt. J. Murray Afried is Engr., Huntingdon.

RICHMOND, VA.—Bids will be received by the city until 5 p. m., Aug. 30, for the construction of sewers in various streets. Charles E. Bolling is City Engr.

WINSTON-SALEM, N. C.—Contract for the new southwest sewer district has been let to the WINSTON MILL SUPPLY CO. Work will be started at once. This line will contain about 2,600 ft. of sewer and will drain First, Poplar, Second, Pine and Spruce Sts.

PENSACOLA, FLA.—Bids are asked until Aug. 30, by the Board of Public Works, L. G. Aymard, Clk., for making and repairing connections of abutting property with sanitary and storm sewer and water and gas mains. Work consists of laying sewer connections amounting to 45,000 lin. ft., and water and gas connections amounting to 10,000 lin. ft.

PRATT CITY, ALA.—The city has voted $45,000 of bonds for sewer construction.

*FORT MORGAN, ALA.—Bids are asked until 1.30 p. m., Sept. 20 by Capt. H. B. Chamberlin, Q. M., U. S. A., for the construction of terra cotta pipe sewers and iron outfall pipe at Fort Morgan.

TRENTON, TENN.—The city has voted in favor of issuing bonds for the construction of sewers in this place.

*LOUISVILLE, KY.—Bids will be received by the Commissioners of Sewerage, W. C. Nones, Chn., until noon Sept. 3 for constructing the Dumesnil St. sewer, Contract 52.

*LOUISVILE, KY.—Bids are asked by the Commissioners of Sewerage of Louisville until noon, Sept. 24, for construction of Sections B-1, B-2, C and D of the Northwestern Sewer, Contracts Nos. 53, 54, 55 and 48. W. C. Nones is Chn.; J. B. F. Breed is Ch. Engr.

CINCINNATI, OHIO.—The Board of Public Service on Aug. 5 awarded contract to THOMAS P. STRACK, Eighth and Plums Sts., for sewers in Glenway and Grand Aves., at $14,453, and to the CONNELLY CONSTRUCTION CO. for sewers on Seegar and Vinton Sts., at $7,643.

COLUMBUS, OHIO.—Bids will be received until Aug. 30 by the Board Public Service, E. W. Hirsch, Secy., for constructing sewers in Haviland Ave., and several alleys.

Bids will be received until Sept. 8 by the Board Trustees Ohio State University, Carl L. Steeb, Secy., for constructing sewers and drains in the grounds of the Ohio State University. F. H. Eno is Engr., Columbus.

HAMILTON, OHIO.—W. H. LOUTHAN has been awarded contract by the Board of Public Service for a sanitary sewer in Hanover St. and sanitary sewer and house connections in East Ave., at $7,119.

INDIANAPOLIS, IND.—Plans are being prepared by Charles A. Brown, Engr. of Sewers, for the construction of a sanitary sewer in Parkway Ave. Estimated cost, about $25,000.

LA FAYETTE, IND.—The Board of Public Works on Aug. 11 awarded contract to WILLIAM F. FREY for constructing sewers in Alabama St. at about $7,748.

STERLING, ILL.—Bids will be received by the Board of Local Improvements, C. E. Sheldon, Secy., until Aug. 27 for a pipe sewer and a brick outlet sewer.

PROPHETSTOWN, ILL.—Contract for constructing the new sewer system has been awarded by the Board of Local Improvements to DEARBORN & JACKSON, of Cedar Rapids, Iowa, at $8,229.

MERRILL, WIS.—The Aetna Engineering Bureau, 125 La Salle St., Chicago, Ill., has been retained by the city to design a system of relief sewers and to superintend the reconstruction of car track system. Part of this work will probably be done this year.

APPLETON, WIS.—Bids are asked until 4 p. m., Aug. 31, by E. L. Williams, City Clk., for furnishing all labor and material for sewers in Drew St., Erb St., Deforest Ave., and a sewer in ravine from Lawrence St. to Prospect St.

BETTENDORF, IOWA.—The city has voted $28,000 of bonds for the construction of a sewerage system.

COUNCIL BLUFFS, IOWA.—The city is planning the construction of a big sewer system in a new sewer district. Estimated cost, about $400,000.

ST. CLOUD, MINN.—The City Council has authorized the City Engineer to prepare plans and specifications for a sewer district in the western and southern portions of the city.

ST. PAUL, MINN.—Bids are asked by the Board of Public Works until 2 p. m., Aug. 30, for the construction of a sewer in a portion of Sheldon Ave. R. L. Gorman is Clk.

GARNETT, KAN.—Burns & McDonnell, Consulting Engineer, Scarritt Bldg., Kansas City, Mo., are preparing plans for sewers for this city. Two systems are planned, one for the northwestern part of the city and the other to drain south and east. Septic tanks will be used for both systems.

JEFFERSON BARRACKS, MO.—Bids will be received by Capt. Stanley H. Ford, Q. M., U. S. A., until 11 a. m., Aug. 30, for construction of 6-in. water and connections to buildings; also water connections to buildings.

HOUSTON, TEX.—Bids will be received by Dan C. Smith, City Comptroller and Secy., until noon, Aug. 30, for performing all labor and furnishing all material required for the construction of sanitary sewers in the First and Sixth Wards. The work will be approximately as follows: 320 lin. ft. 24-in., 5,749 lin. ft. 15-in., 557 lin. ft. 12-in. pipe, 2,576 lin. ft. 8-in. pipe, with the necessary manholes and flush tanks, Ys, etc. Specifications and plans, bidding blanks and form of contract can be obtained upon application at the office of F. L. Dormant, Consulting Engr., Houston.

SAN ANTONIO, TEX.—The city has voted $20,000 of bonds for the construction of sewer system in Beacon Hill.

EL RENO, OKLA.—Bids are asked until Sept. 1, by F. T. Stackpole, City Clk., for constructing nine blocks of storm sewers.

OKLAHOMA CITY, OKLA.—Bids are asked by the city until Aug. 30 for extension to Blackwelder Ave. storm sewer. Bob Parman is City Clk.

MONTE VISTA, COLO.—Contract for constructing the district sewer has been awarded to E. M. KERNS, of Denver, at about $17,000.

EVERETT, WASH.—The EVERETT CONSTRUCTION CO. has been awarded contract for the proposed sewer in the northwest part of the city at $27,974.

KENT, WASH.—L. Y. STAYTON has been awarded contract for installing a sewer system for the city at $18,929.

SAN FRANCISCO, CAL.—The Board of Public Works has awarded contract to the COAST CONSTRUCTION CO., 517 Market St., for constructing sewers in the Bay View and Silver Terrace districts at about $78,000. Noted Aug. 12. Marsden Manson is City Engr.

The HEALY-TIBBITTS CONSTRUCTION CO., 268 Market St., was awarded contract on Aug. 13 for the North Beach intercepting sewer, at $86,780. The board recommended to the Supervisors that $96,000 be set aside for a reinforced concrete sewer in H St., between 20th and 40th Aves.

HAMILTON, ONT.—The City Engineer has estimated the cost of constructing a new sewer in the West End at $27,513.

ORILLIA, ONT.—Bids will be received until 8 p. m., Sept. 9, by C. E. Grant, Town Clk., for constructing the following works: Contract "A," sanitary sewers, about 15,000 lin. ft.; Contract "B," sewage pumping station; contract "G," sewage pumping machinery; Contract "O," force main, about 7,000 ft. of iron pipe. Willis Chipman, C. E., 103 Bay St., Toronto, is Ch. Engr.

## STREETS AND ROADS.

(** denotes that this work is advertised in Engineering News.*)

*FORT ANDREWS, MASS.—Bids are asked by Capt. R. H. Rolfe, Constructing Q. M., U. S. A., until 10 a. m., Sept. 15, for the construction of roads and walks, and necessary grading at Fort Andrews.

PROVIDENCE, R. I.—The State Board of Public Roads on Aug. 11 awarded contracts, it is reported, for paving 2½ miles of the Little Compton and Tiverton Road to AMOS D. BRIDGES SONS, INC., of Hazardville, Conn., at $10,165.

HARTFORD, CONN.—Contracts for the construction of state road work, bids for which were opened by the State Highway Commissioner on Aug. 23, have been awarded as follows: City of Ansonia, 5,510 lin. ft. macadam-telford road on North Main St., to FRANK BREAULT, Ansonia, at 72 cts. per sq. yd. for macadam, 89 cts. per sq. yd. for telford, $750 for rock excavation and 40 cts. per sq. yd. for cobble gutters. Other bidders were: B. D. Pierce, Jr., Co., Bridgeport, $1.06, $1.66, $2,000 and 65 cts.; Joseph Mascetti, Torrington, 76½ cts., $1.26, $1,300 and 45 cts.; Edward McManus, Waterbury, $1.06½, $1.19½, $1,600 and 50 cts.; John Davidson, Ansonia, 76 cts., 91 cts., $725 and 35 cts.; A. Brazos & Sons, Middletown, 73 cts., 97 cts., $500 and 60 cts. Town of East Lyme, 5,840 lin. ft. gravel-telford road on the Boston Post road, including six 24-in. and two 15-in. tile culverts, to BRYAN F. MAHAN, New London, at $1.49 for gravel and $1.87 for telford. Other bidders were: F. Arrigoni & Bro., Durham, $1.59 and $2.05; B. D. Pierce, Jr., Co., Bridgeport, $1.56 and $2.16; A. Brazos & Sons, Middletown, $1.66 and $1.99. Town of Old Lyme, 13,768 lin. ft. gravel-telford road on the Boston Post road, including two 18-in. and five 24-in. tile culverts and two reinforced-concrete bridges, to BRYAN F. MAHAN, New London, at $1.49 for gravel and $2.18 for telford. Other bidders were: A. Brazos & Sons, Middletown, $1.65 and $1.98; F. Arrigoni & Bro., Durham, $1.59 and $2.05; B. D. Pierce, Jr., Co., Bridgeport, $1.92 and $2.52.

*HERKIMER, N. Y.—Bids for paving Eastern Ave. with brick, bitulithic or other pavement, also for laying storm sewer will be received by the Board of Trustees until 8 p. m., Aug. 31. William Wright, Jr., is Clk.

HERKIMER, N. Y.—The Board of Supervisors on Aug. 5 voted to appropriate $32,000 to complete the Webb-McKeever highway.

HOOSICK FALLS, N. Y.—GEORGE H. GIFFORD, of Jamaica, L. I., N. Y., has secured the contract for 35,943 sq. ft. of sidewalk, 5,863 sq. ft. of gutters, 7,273 lin. ft. curb, etc., bids opened on Aug. 6 by the Public Improvement Commission, at $10,051. Other bids were: Goodale & Jannson, Schenectady, $10,990; Kingsbury Construction Co., Sandy Hill, $11,582; M. Fitzgerald, Hoosick Falls, $12,757; Tri-Ad. Construction Co., Schenectady, $12,894; Walter E. Hassam, Worcester, Mass., $12,936; William King, Watervliet, N. Y., $14,311.

*ALBANY, N. Y.—Bids were received as follows on Aug. 17 by the State Commission of Highways for repairs of improved highways: Repair contract No. 19, East Ave. road No. 5, County of Monroe, R. M. COWLES, $16,940 (awarded contract); Frank L. Cohn, Buffalo, $17,700; Frederick A. Brotch, Jr., Rochester, $19,000; A. J. Rockwood, Rochester, $17,500. Repair contract No. 20, ridge, Section 1, road No. 6, same county, Thomas Rucknall, Albion, $22,044; FREDERICK A. BROTSCH, Jr., Rochester, $18,000 (awarded contract); George F. Cook, Glens Falls, $24,445; H. C. Schroeder, Rochester, $19,757; John Boylan, Barnard, $19,596; A. J. Rockwood, Rochester, $19,500. Repair contract No. 21, Scottsville, Section 1, road 63, same county, Thomas Hucknall, $24,740; Hollihan & Daley, Rochester, $24,283; FREDERICK A. BROTSCH, JR., $22,400 (awarded contract); A. J. Rockwood, $24,000; H. C. Schroeder, $23,957. Repair contract No. 22, Delaware Turnpike, Sections 1 and 2, roads 7 and 41, Albany County, M. F. Dollard, Albany, no gross sum; ALONSO SCHAUPP, Albany, $9,806 (warded contract). Repair contract No. 24, Monroe County, road No. 60, Fairport road, Monroe Ave. Road No. 94, Frederick A. Brotsch, Jr., $11,100; HORACE E. LAPP, Rochester, $10,941 (awarded contract); Thomas Hucknall, Albion, $12,138; W. H. Murray, Pittsford, $12,606; Hollihan & Daley, Rochester, $11,820. Repair contract No. 25, Monroe County, road No. 98, Webster Section 1, Road No. 168, Dugway, Section 1, road 172, Portland Ave., Frederick A. Brotsch, Jr., $10,216; Star Contracting Co., Glens Falls, $14,340; Thomas Hucknall, Albion, $12,071; J. W. Lewis Constructing Co., Rochester, $9,950. Repair contract No. 27, Erie County, road No. 23, Frank H. Cohn, Buffalo, $3,989; Thomas Hucknall, Albion, $3,919; FREDERICK J. MUNN, $3,294 (awarded contract). Repair contract No. 26, Monroe County, road 80, Section 1, road 171, Section 1, road 257, Section 4, THOMAS HUCKNALL, Albion, $12,515 (warded contract); Frederick A. Brotsch, Jr., $14,000.

ALBANY, N. Y.—Bids will be received by the State Commission of Highways, S. Percy Hooker, Chn., until Sept. 2, for the repair or resurfacing of highways in Delaware and Chemung Counties.

NEW YORK, N. Y.—Bids are asked by the Commissioner of Docks until noon, Sept. 2, for furnishing all the labor and materials required for preparing for and laying iron slag block and granite pavement on portions of the marginal St., between Whitehall and Broad Sts., East River, and granite block pavement betwen Albany and Liberty Sts., North River, and between West 30th and West 33d Sts., North River, and for laying a granite crosswalk along the southerly line of West 22d St., North River, Boro. Manhattan.

Bids are asked by John F. Ahearn, Pres. Manhattan Boro., until 2 p. m., Aug. 31, for regulating and repaving with sheet asphalt pavement, granite block, asphalt block and wood block pavement on a concrete foundation the roadways of various streets; also for grading, curbing and flagging.

HORNELL, N. Y.—Bids will be received by the Board of Public Works, A. F. Bannon, Jr., Supt., until Aug. 31, for grading, curbing and paving with vitrified brick or block on concrete foundation, Center St. and portions of Hornell and Canister Sts.

WHITE PLAINS, N. Y.—Bids will be received until Sept. 7 by the Board of Village Trustees, Earl P. White, Clk., for repairing with brick between the tracks of the Tarrytown, White Plains & Mamaroneck Ry. Co., and 2 ft. each side, on Grove St. and Railroad Ave.; also relaying the macadam between the tracks of said railway company and 2 ft. each side on Mamaroneck, Westchester, Central Aves., New York Post Road and Lake St.

BUFFALO, N. Y.—Contracts have been awarded as follows by F. G. Ward, Comr. Pub. Wks.: For paving Burgard Pl. with asphalt, H. P. BURGARD CO., 275 Lathrop St., at $5,900. Other bidders were: The German Rock Asphalt & Cement Co., the Barber Asphalt Paving Co. and F. V. E. Bardol. Repaving Kehr St. with asphalt, GERMAN ROCK ASPHALT & CEMENT CO., D. S. Morgan Bldg., at $5,790. Other bidders were: H. P. Burgard Co. and the Barber Asphalt Paving Co. Paving Hedley St. with asphalt, BARBER ASPHALT PAVING CO., 880 Ellicott Sq., at $6,100. Other bidders were: The German Rock Asphalt & Cement Co., H. P. Burgard Co. and F. V. E. Bardol. Paving Alabama St. with asphalt, GERMAN ROCK ASPHALT & CEMENT CO., at $4,080. Other bidders were: The Barber Asphalt Paving Co., H. P. Burgard Co. and F. V. E. Bardol.

*BAYONNE, N. J.—Bids will be received by the Council until 8 p. m., Sept. 7, for all of the labor and material for asphalt pavements and appurtenances on several streets. For details see advertisement in this issue.

ELIZABETH, N. J.—Bids will be received until Sept. 1 by the City Council for paving Court St. with Belgian block pavement, on sand foundation, 4,890 sq. yds. N. K. Thompson is St. Comr.

MORRISTOWN, N. J.—Bids were opened on Aug. 2 by the Board of Chosen Freeholders, Gustave A. Becker, Chn., for constructing State aid roads. Contracts have been awarded as follows: For paving Morris Plains and Parsippany Road with Amesite, to B. M. SHANLEY'S SONS CO., of Newark, at $32,432; for Gladstone and Chester road, of Amesite, to A. C. DENEHAN & CO., INC., of Trenton, at $40,174; for Pompton and Newark Turnpike of macadam with asphalt binder, to COLFAX & STEELE, of Pompton, at $17,432.

The JERSEY PAVING CORPORATION, Newark, N. J., has been awarded contract at $7,399 for paving Washington St. with Metropolitan block, 2,500 sq. yds. Bids were opened on Aug. 6. List of bidders noted last week.

NEWARK, N. J.—The Board of Public Works on Aug. 11 is stated to have awarded the contract for paving with telford a portion of Bridge St. to R. ARTHUR HELLER and JOHN C. CORY.

ATLANTIC CITY, N. J.—Bids will be received by the Board of Chosen Freeholders of Atlantic County until Sept. 8 for grading and paving Shore road from the bridge at Absecon to New Jersey Ave., Somers Point. E. D. Rightmire is County Engr., 108 Bartlett Bldg., Atlantic City.

CAMDEN, N. J.—GETTS & CO. were awarded contract on Aug. 11 by the Board of Freeholders, at $19,496, for the construction of Browns Corner road and E. C. HUMPHREYS, at $12,818, for the construction with Amiesite of the Nicholson road.

HARRISBURG, PA.—The City Council on Aug. 2 awarded contract, it is stated, for curbing N. Front St. to S. W. SHOEMAKER & SON, of Harrisburg, at 65 cts. per lin. ft.

HAMBURG, PA.—The WARNER-QUINLAN CO., 438 S. Salina St., Syracuse, N. Y., has received contract at $1.56 per sq. yd. and 75 cts. per lin. ft., for sheet asphalt pavement and granite curb, respectively. The work includes 1,650 sq. yds. of sheet asphalt pavement and 760 lin. ft. of curb.

WASHINGTON, PA.—Bids are asked until noon, Sept. 1, by the County Commissioners, for the construction of the following roads in Washington County: Monongahela to Donora, two miles and 200 ft. of brick; Houston to Cannonsburg, 2,970 ft. of brick; Monongahela Pike, from Clokeyville to the William Foulke farm, two miles and 200 ft., of macadam; Monongahela Pike, from the Annie George farm to Ginger Hill, one mile and 120 ft., of macadam; Claysville, Prosperity road, from Claysville to Sawhills schoolhouse, two miles and 1,500 ft., of macadam; Washington, Meadowlands road, from McClane bridge to Meadowlands, one mile of macadam.

BALTIMORE, MD.—B. T. Fendall, City Engr., is preparing plans for the improvement of that portion of Franklin road within the city limits. Estimated cost, $75,000.

Bids will be received until Aug. 30 by W. W. Crosby, Ch. Engr., Highway Division, Maryland Geological Survey, 532 N. Howard St., for constructing a section of State road No. 1, along the Baltimore-Washington road between Gwynn's Falls and Caton Ave., a distance of 6,242 ft.

*BALTIMORE, MD.—Bids were opened on Aug. 16 by the State Roads Commission, Baltimore, for constructing state highways as follows: Baltimore County, 1.84 miles, part vitrified brick and part tar macadam, from city limits to Westport: M. A. Talbott Co., $78,147; F. W. Staley, $77,720; P. F. Reddington, $77,214. The lowest bidders for the other work were: Washington County, east and west from Clear Springs, 4.29 miles, C. P. Waller, $44,840; Howard Co., from West Friendship toward Sykesville, 3.21 miles, M. J. Grove, $35,594; Queen

Anne's County, from Starkey's Corner toward Centreville, 3.14 miles, McCormick & Co., $31,586; same county, from Chester River toward Church Hill, three miles, F. M. Latham, $26,252.

NORFOLK, VA.—The Seventh Ward Local Board, J. T. Deal, Chn., on Aug. 17 awarded contract to the ATLANTIC BITULITHIC CO., of Richmond, to pave eleven streets in Park Pl, with bitulithic pavement, approximately 121,000 sq. yds. at $286,000. Work is to commence at once and will be completed in 200 days.

EMPORIA, VA.—Bids will be received until Aug. 30 by P. St. J. Wilson, State Highway Comr., Richmond, for constructing about 30 miles of gravel road in Greenesville County.

CHATHAM, VA.—J. T. BENNETT, Chatham, has received the contract for macadamizing four miles of public highway in Pittsylvania County.

NEWPORT NEWS, VA.—Bids are asked until Sept. 14 by the city for paving West Ave. and 32d St. with vitrified brick on sand base, with grout filler, and block asphalt on sand base, granite curb on east side of West Ave. Floyd A. Hurgins is City Clk.

ATLANTA, GA.—The following bids were opened on Aug. 9 by the city for paving Decatur St., about 22,000 sq. yds., creosoted wood block on 6-in. concrete foundation, price per sq. yd.: Milner Sons Co., Louisville, Ky., $3.15; Crockett Paving Co., Selma, Ala., $2.81; F. J. Meadow, Jr., Atlanta, $3.03½; B. Somers Co., Atlanta, $2.74; U. S. Wood Preserving Co., New York, N. Y., $2.64; Georgia Granite Co., Atlanta, $2.51; S. H. Venable, Atlanta, $2,499. R. M. Clayton is City Engr.

BIRMINGHAM, ALA.—The TISSIER PAVING CO., of Birmingham, has secured contract for 5,000 sq. yds. of cement walk, and C. M. BURKHALTER, of Birmingham, for 5,000 lin. ft. cement curb and gutter, and 14,000 cu. yds. grading.

HUNTSVILLE, ALA.—The city has awarded contract to the METROPOLITAN ENGINEERING & CONSTRUCTION CO., of Huntsville, for paving Madison St. with mineral rubber asphalt. Estimated cost, $40,000. Thomas W. Smith is Mayor.

PRATT CITY, ALA.—The city has voted $15,000 of bonds for street improvements.

CLINTON, TENN.—Bids are asked by J. K. P. Wallace, Supt., until noon, Sept. 15, for the construction of pike roads in Anderson County.

LOUISVILLE, KY.—Bids are asked by the Board of Public Works until Aug. 27, for the improvement of various streets. Estimated cost, $58,000.

NEWARK, OHIO.—Bids will be received by the Board of Public Service, A. C. Gundlock, Clk., until Aug. 31, for paving with brick or sheet asphalt, N. Fourth and Buena Vista Sts., about 19,557 sq. yds. of pavement and 10,000 lin. ft. of curbing. C. H. Wells is City Engr.

MILLERSBURG, OHIO.—Contract for about 5,000 sq. yds. of brick paving, with concrete curb, bids opened on Aug. 12, has been awarded by the village to LEE & GRIGGS, of Clyde, at $7,505. R. G. Defrees is Engr.

CINCINNATI, OHIO.—Bids will be received by the Board County Commissioners, Fred Dreihs, Clk., until Sept. 10 for oiling Reading Pike, Sycamore Township, as per specification No. 939.

YOUNGSTOWN, OHIO.—THOMAS McKEE & CO. have been awarded contract by the Good Roads Commission for macadamizing the Boardman east and west center road at $21,181. Length of road is 3.34 miles.

GREENWICH, OHIO.—W. W. PACE has secured contract at $26,435, for paving three streets in this city.

UPPER SANDUSKY, OHIO.—Bids are asked until noon, Sept. 2, by the County Commissioners, J. N. Traxler, County Audr., for the construction, including grading and stoning of a road 9,215 ft. long in Marseilles and Jackson Townships.

TOLEDO, OHIO.—Bids are asked until 10 a. m., Sept. 2, by the Board of County Commissioners, D. T. Davies, Jr., County Audr., for furnishing all labor and materials for repairing the following various roads.

PERU, IND.—Bids will be received by the Commissioners of Miami County Sept. 7 for the construction of gravel road No. 2 in Erie township and gravel road No. 3 in Trent Township including the construction of necessary bridges and arches. Charles Griswold is County Audr.

INDIANAPOLIS, IND.—Bids are asked by the Board of Park Commissioners until 11 a. m., Sept. 3, for the construction of a boulevard and parkway on the north bank of Fall Creek from 23d St. to Illinois St. Dr. Jamason is Chn.

KENTLAND, IND.—Bids are asked by Elmer R. Brigham, Audr., Newton County, until 1 p. m., Sept. 7, for the construction of the following macadam road in Jefferson Township. No. 3992, Lewis and Kenoyer road, 19,928 ft. in length.

SCOTTSBURG, IND.—Bids are asked by Frank Gardner, Audr. Scott County, until 11 a. m., Sept. 6, for the construction of 9,373 ft. of gravel road in Finley Township.

NOBLESVILLE, IND.—Bids are asked by N. W. Cowgill, Audr., Hamilton County, until 1 p. m., Sept. 8, for the construction of four gravel roads.

BLOOMINGTON, IND.—Bids are asked by the Commissioners of Monroe County until Sept. 10 for the construction of three gravel roads in Bloomington Township. Horace Blakely is County Audr.

ROCKVILLE, IND.—Bids are asked by H. A. Henderson, Audr. Park County, until 1.30 p. m., Sept. 7, for the construction of a gravel road in Adams Township, known as the Edgar Adams road; also for the construction of a gravel road on the line between Adams and Washington Townships, known as the Alfred Nutgrass road.

MUNCIE, IND.—Bids are asked by Joseph E. Davis, Audr. Delaware County, until 10 a. m., Sept. 8, for the construction of two gravel roads in Niles Township, three in Union Township and one in Perry and Liberty Townships.

WINAMAC, IND.—Bids are asked by the Commissioners of Pulaski County until Sept. 8 for the construction of a gravel road between Tippecanoe, Monroe and Harrison Townships. T. E. Reese is County Audr.

BUFFTON, IND.—Bids are asked by the Commissioners of Wells County until Sept. 8 for the construction of three stone roads in Union, Jefferson and Lancaster Townships. O. D. Garrett is County Audr.

CHICAGO, ILL.—Contract for paving with macadam Western Ave., 16,000 sq. yds., bids opened on Aug. 10, has been awarded to JOHN ZEDEN, 5114 Carpenter St., at 95½ cts. per yd.

Bids will be received until Aug. 28 by John J. Hanberg, Comr. Pub. Wks., for paving with No. 2 granite blocks on concrete foundation the subways under the C. & A. R. R. at Ashland Ave.; furnishing and delivering at Madison and Market Sts., 2,000 sq. yds. No. 2 granite block and improving with No. 2 granite block, Fulton St.

STREATOR, ILL.—JOSEPH WALTER and CHRIST RICHARD, Streator, Ill., have secured contract for the graveling of one mile of road west of this place.

ROCHELLE, ILL.—The Aetna Engineering Bureau, 125 La Salle St., Chicago, Ill., has been retained by the city and has made plans for 30,000 yds. of brick paving and storm water sewers in connection with the paving. This work will be advertised shortly.

*PARIS, ILL.—Bids are asked by F. J. Trogdon, Pres. Bd. Local Improvements, until 7.30 p. m., Sept. 3, for paving South Central Ave., from Jasper to Jackson Sts.

KNOXVILLE, IOWA.—We are officially advised that plans and specifications are being prepared by M. G. Hall, C. E., Centerville, Iowa., for the construction of eight blocks of creosote wood block pavement at Knoxville.

FORT LEAVENWORTH, KAN.—Bids will be received until Sept. 7, by Capt. William D. Davis, Q. M., U. S. A., for constructing roads, walks, driveways, gutters, curbs, etc.

HUTCHINSON, KAN.—Bids will be received by the Board of Commissioners until 3 p. m., Sept. 8, for all or part of 36,000 sq. yds. of either brick, bithulithic, creosoted wood block, bituminous concrete or Portland cement concrete pavement. Separate bids will be received on approximately 7,000 lin. ft. of curb and gutter. G. L. McLane is City Engr.

ST. LOUIS, MO.—The Board of Public Improvements on Aug. 10 awarded contracts, it is stated, for paving as follows: To WILLIAM R. BUSH CONSTRUCTION CO., 211 N. Seventh St., Poromac, 15th Sts., Iowa, Oregon and Jefferson Aves., with brick, at $135,368; SKRAINKA CONSTRUCTION CO., 319 N. Fourth St., with brick, Penrose St., $5,964; FRUIN-CONLON CONTRACTING CO., Laclede Bldg., Doddridge St., Horton and Maple Pl., Etzel, Baden Aves., $18,876; WEBB-KUNZE CONSTRUCTION CO., Juniata St., Wells and McCausland Aves. and Blendon Pl., $66,288; JAMES T. McMAHON, Warne Ave. and 19th St., $17,216; GRANITE BITUMINOUS PAVING CO., Olive St., $9,741; G. Evermann & Bro., 1216 S. Grand Ave., for Jefferson Ave., $23,069.

LITTLE ROCK, ARK.—E. A. Kingsley, Supt. Pub. Wks., is preparing plans and profiles for paving in Water-Cross St. Improvement District. Estimated cost, $135,000. Bids will be received Sept. 1.

TEMPLE, TEX.—L. OCKANDER, Waco, Tex., has received the contract for paving 21½ city blocks. Estimated cost, $125,000.

SPOKANE, WASH.—Plans are being prepared for paving in the Browne addition, also Division, Washington, Lincoln, Monroe and Maple Sts. and Eighth Ave.

EVERETT, WASH.—THORSVIG & MILEY have been awarded contract for improving Colby Ave. at $19,920.

PORTLAND, ORE.—The Cascade Contract Co. has submitted the lowest bid, it is stated, for constructing hard surface pavements on several streets at $52,726.

LOS ANGELES, CAL.—DORAN, BROUSE & PRICE, 207 S. Broadway, Los Angeles, Cal., were awarded contract at $98,524 on Aug. 3 by the Board of Supervisors for the improvement of Sunset and Wilshire Boulevards at $98,525. The work includes macadamizing, etc.

MOOSE JAW, SASK.—Contract for about 67,000 sq. ft. of concrete sidewalk, and 21,000 ft. wood block crossings, etc., bids opened on Aug. 9, has been awarded by the city to NAIRN BROS., of Moose Jaw. John D. Simpson is City Clk.

## MANUFACTURING PLANTS.

ST. ALBANS, VT.—It is stated that the St. Albans Granite Co. will establish a granite finishing plant here. J. W. Giddings, of Waterbury, Conn., is promoter. The capital stock of the concern is fixed at $25,000. Two or three sites for the sheds where railroad side-tracks can be had and two or three acres of land acquired are being considered. The company will erect a building 326 ft. long × 60 ft. wide, costing upwards of $10,000 and equipped with all necessary machinery. The company will bring rough granite here from Barre and Hardwick quarries, stop it off at the sheds, finish it, and reship it to destination. The business is chiefly monumental and carved work requiring skilled labor, employing about 40 men.

WORCESTER, MASS.—The Whittall Carpet Co. is to build an addition to the present building at the plant. The cost is estimated at $100,000 and the contract has been placed with NORCROSS BROS. CO., of Worcester. The building will have four stories and basement, and be 266 × 60 ft. It will be fireproof, with brick exterior and concrete used for the floors, beams and columns. It will be built on the north side of Brussels St.

NEW BEDFORD, MASS.—The contract for building the $300,000 addition to the Bennett Mill plant of the New England Cotton Yarn Co. has been awarded to the B. F. SMITH CO. It is proposed to make a 70,000-spindle mill, which will be an increase of 50,000 spindles.

HOLYOKE, MASS.—We are officially advised that contract has been let to DOANE & WILLIAMS for the new office building which will be erected by the Judd Paper Co. on the recently bought property on Race St., Holyoke, Mass. The plans call for a 1-story brick building, 50 × 75 ft.; and in the rear of the warehouse a 1-story brick building, 24 × 30 ft., will be erected for an automobile shed. Heating and lighting contracts have not been awarded.

The Germania Mills, Holyoke, Mass., have awarded the contract for the addition to be built to its plans on land purchased by the company from the city of Holyoke, to the FRED T. LEY CO., of Springfield, Mass. The structure will cover 40,000 sq. ft. and will be one story in height, costing about $50,000. It is expected that the addition will be completed and ready for occupancy by Jan. 1.

BRIDGEPORT, CONN.—The contract for the plumbing work for the new factory of the Warner Bros. Co. has been awarded to the SHAFFER-MARSH CO., of Bristol, Conn., for approximately $10,000.

NORWICH, CONN.—The Ponemah Mills Co. has had plans prepared for an addition, 670 × 200 ft., to be one story high, of heavy mill construction with basement and tooth-saw roof. The estimated cost is $225,000.

NEW YORK, N. Y.—Bids are asked by Nicholas J. Hayes, Fire Comr., until 10.30 a. m., Sept. 7, for furnishing all the labor and materials required for alterations and additions to repair shop, located on northeast corner of Twelfth Ave. and 56th St., Boro. of Manhattan.

NEW YORK, N. Y.—Bids are asked by John G. O'Keeffe, Acting Pres. of Bd. of Trustees of Bellevue and Allied Hospitals, until 3 p. m., Sept. 7, for all the labor and materials required for the erection and completion of the laundry building, including the plumbing, heating, electric and refrigerating work of the new Bellevue Hospital, situated on First Ave. and bounded by 26th and 29th Sts., Boro. of Manhattan, the City of New York.

AMSTERDAM, N. Y.—The capital stock of McCleary, Wallin & Crouse, manufacturers of carpets and rugs at Amsterdam is to be increased from $1,000,000 to $2,000,000. An extension to the tapestry mill of the concern will be erected, the dimensions of which will be 50 × 80 ft.

ROME, N. Y.—The Rome Soap Mfg. Co., 223 Dominick St., M. R. Brown, Pres., is having plans prepared for a fireproof soap manufacturing plant of reinforced concrete to cost about $200,000.

ROCHESTER, N. Y.—F. H. RAPP & CO., Circle St., have been awarded general contract for addition to a factory building for the Shinola Co., George E. Davison, Mgr., 10 Jay St. The addition will be 36 × 66 ft., four stories high, of brick mill construction, and will cost $30,000. Crandall & Strobel, 401 E. & B. Bldg., are Archs. and Engrs.

BUFFALO, N. Y.—The Standard Mirror Co., 63 Carroll St., is having plans prepared for a 1-story factory, 80 × 250 ft., of reinforced concrete, or brick, which it will erect on the Pennsylvania R. R. at Harrison St.

NEWARK, N. J.—Plans for a leather factory are in the hands of William P. O'Rourke, Supt. of Buildings, and as soon as they are approved application for a permit will be made. The factory will be built for the J. H. Ladew Co., 103 Park Ave., New York, and will be in the meadows on the west side of the Passaic River, near the Plank Road. J. Harvey Ladew, of New York, is Pres. The plan will cost $150,000. It will be of brick. As soon as the permit is given work will be started. About 300 men will be employed. Sole and belt leather will be manufactured.

PASSAIC, N. J.—Contracts for the Henry Doherty mill, to be erected by the Textile Building Co. at Lake View, have been filed at the County Clerk's office. The cost for the main building, the power-house and silk vault is $139,000, and contract has been awarded to the P. S. VAN KIRK CO. The mill will be 446 ft. long and 66 ft. wide. It will occupy the full length of a block with the exception of a few feet.

PHILADELPHIA, PA.—Plans for improvements to the plant of the Bernstein Mfg. Co. at Third and Westmoreland Sts. are being prepared by Ballinger & Perrit, Archs., 1200 Chestnut St. The work will include an additional story, 300 × 50 ft., a smaller addition and a new building. The cost will be about $35,000.

The WILLIAM STEELE & SONS CO., 1600 Arch St., will begin the erection of a 1-story drying building, 75 × 200 ft., for the Blabon Oil Cloth Works, on Blabon St. north of Hunting Park Ave. It will measure 75 × 200 ft. and will cost $60,000.

PHILADELPHIA, PA.—John Megraw, Land Title Bldg., has purchased a tract at Frankford Junction on the Pennsylvania R. R., on which he will build a factory, 70 × 375 ft., for the American Cork & Seal Co. The cost of the building and ground will be $85,000. The company is located at 1423-25 Vine St.

An addition is shortly to be erected to the chocolate factory of H. O. Wilbur & Sons Co., Inc., at 231-33-35 North Third St. The plans have been completed by Walter Smedley, Arch., Stephen Girard [illegible], and Cramp & Co., J. E. & A. L. Penno[illegible] and Harry H. Wehmeyer are taking estim[illegible] The building will be of reinforced [illegible] construction. It will be six stori[illegible] and will measure 26 × 300 ft.

BALTIMORE, MD.—The [illegible]erican Label Mfg. Co. has had plans pre[illegible] by Wister, Evans & Patterson, Engrs., [illegible] a building that will nearly double th[illegible] present plant. The building will be of re[illegible] concrete and mill construction, a[illegible] will measure about 100 × 200 ft. Esti[illegible] on it are now being received from M[illegible] Bros., Henry S. Rippel, J. Henry [illegible], Edward Brady & Son, William T. M[illegible], the Piel Construction Co. and John [illegible] & Sons Co.

ANDERSON, S. C.—The [illegible] of the Cox Mfg. Co., Anderson, [illegible] have decided to install a full comp[illegible] of looms for their 15,000 ring spindl[illegible] They have been manufacturing yarns, [illegible] this installation will enable the mill to [illegible] cotton cloth. The exact number [illegible] looms to be placed has not been annou[illegible] but probably about 200 will comple[illegible] the number of spindles mentioned. [illegible] for the new machinery will be a[illegible] soon.

NEWBERRY, S. C.—The directors of the Newberry Mills have let the contract for building the new $125,000 addition to the mill to the GALLIVAN BUILDING CO., of Greenville. The addition will be at the southern end and will be a wing, 80 × 180 ft., along O'Neall St., corresponding to the wing at the northern end. It will be three stories high.

COLUMBUS, GA.—The contract for erecting the addition to the plant of the Columbus Mfg. Co. was awarded to T. C. THOMPSON & BROS., of Birmingham, Ala., and the ground for the new mill will be broken at once. The addition to the plant will double its capacity. The present building, which is four stories high, 261 ft. long, 128 ft. wide, will be extended west a distance of 272 ft. The enlarged building will be 533 ft. long, 128 ft. wide, four stories high. The addition to the mill is to be completed by the contractors within five months. It is believed that the enlarged plant will be in operation by June 1.

MACON, GA.—GEORGE B. SWIFT & CO., 188 Madison St., Chicago, Ill., has secured the contract, it is stated, from the Central of Georgia R. R. Co., for a woodworking and blacksmith shop in Macon that is to cost $32,000. The shop will be erected on the company's property near Hammond, Division and Tupelo Sts.

MEMPHIS, TENN.—The Central Textile Corporation has been chartered in Augusta, Me., with an authorized capital stock of $1,000,000, to operate here. Half of this amount is to be paid in at once, and the remainder of the stock will be held for the future development of the business. About half of the capital has been subscribed in Memphis, the remainder by men in the New England States who are interested in the cotton mill business. The Board of Directors lately elected, consists of O. H. P. Piper, J. A. Goodwin, O. C. Armstrong, W. C. Johnson, Stenning Coate and Walter H. Carter. Arrangements have been made for securing a site for the mill in the manufacturing district of New South Memphis, near the plant of the American Bag Co., and orders are to be placed at once for the machinery. The mill will be equipped at the beginning with 25,000 spindles and will employ 400 people. At first it is the intention to manufacture sheetings and the material used for the manufacture of cotton bags.

CINCINNATI, OHIO.—We are officially advised that the RAYMOND CONCRETE PILE CO., 135 Adams St., Chicago, and 90 West St., New York, through its Cincinnati representative, Charles H. Glandorf, has secured the contract for placing concrete piles in the foundations of an automobile building for Haberer Bros., Gest and Evans Sts., Cincinnati, Ohio. Albert Kuball is the Arch. for the building.

TOLEDO, OHIO.—The Federal Creosoting Co., of Chicago, has awarded the contract to build its Toledo plant to DEVORE & McGORMLEY. The creosoting plant will have three buildings. A retort structure, a power-house and a combination office and machine shop. Ground will be broken for the new buildings at once. The contractor agrees to complete the work in 90 days. The structures are to be erected on the land just acquired by the creosoting company at Air Line Junction, near the intersection of the Lake Shore and Terminal roads.

SPRINGFIELD, OHIO.—Foundations have been completed for a $12,000 brick factory addition, to be erected for the Bettendorf Metal Wheel Co. The general contract has been let to WILLIAM F. POOL, 1516 Pearl St., and brick work to T. F. QUINN, 130 West Pleasant So., Springfield.

ANDERSON, IND.—The Welchel Electric Co. has incorporated with $25,000 capital to establish and equip a factory for the manufacture of electrical machinery and appliances. Bert Welchel, J. W. Jones and A. S. McCall are Dirs.

FORT WAYNE, IND.—Plans are under way for the erection of a 4-story addition to the Fort Wayne Electric Works and also a 5-story office building facing McCullough Park. James J. Wood is Pres.

PRINCETON, IND.—The Gardner Printing Co. will ask for bids for the construction of an addition to its plant as soon as plans can be completed. Estimated cost, $[illegible],000.

JOLIET, ILL.—The Champ[illegible] Machinery Co., P. F. Carroll, Pres., Jo[illegible] Keep, Vice-Pres., and Royster Oliver, S[illegible] and Treas., Joliet, Ill., contemplate the erection of a 2-story concrete factory, 66 × 150 ft. Charles L. Wallace, 323 Jefferson St., Joliet, Ill., is Arch.

MARSHALLTOWN, IOWA.—Bids are asked by the C. A. Dunham Co. until Aug. 27 for the construction of a brick and mill construction office building, a brick, steel and concrete factory building and a brick and concrete power-house, and underground tunnels. R. R. Maybory is Arch., Cedar Rapids, Iowa.

MINNEAPOLIS, MINN.—The Twin City Separator Co. will erect a 2-story brick factory building, 56 × 48 ft., at 2841-47 Dupont Ave. Cost $5,000.

William M. Kenyon, Arch., Guaranty Bldg., is preparing plans for a 3-story reinforced-concrete or cement block plant, 165 × 275 ft., to be erected near Ninth St. and Ninth Ave. S. E., for the Minneapolis Motor & Truck Co. Cost, $100,000.

MARSHALL, TEX.—The Waters-Pierce Oil Co. is making arrangements to rebuild its plant which burned here several months ago. All of the buildings will be of concrete and the warehouse will be 25 × 70 ft., the cooper shop 25 × 50 ft., and the iron barrel house 25 × 50 ft.

TACOMA, WASH.—A. M. Hunt and G. M. Wells have taken a lease on the property held by H. J. Schwinn & Co., and will erect a plant to build boats and launches. The firm is known as the Marine Supply Co.

BELLINGHAM, WASH.—A cement plant, with a capacity of about 1,000 bbls. per day, will be established here immediately. The plant will employ about 100 men and the distance will be only about three-quarters of a mile from the Great Northern Ry. Jacob L. Pritz is interested.

SEATTLE, WASH.—The Sheffield Casting & Mfg. Co., of Sheffield, Ala., will erect a pipe plant here at a cost of $500,000.

Leo J. Devlin, Arch., Pacific Bldg., San Francisco, has completed plans and specifications for a bottling plant for the Seattle Malting & Brewing Co. The plant is to be located at Bakersfield and the plans and specifications have been placed in the hands of the owner, who will either do the job by the day or let the contract himself. The work will cost about $10,000.

PORTLAND, ORE.—Plans have been prepared for a 2-story brick factory building, 40 × 70 ft., to be erected for William Grassley, on East 28th St., for the manufacture of boxes.

WINNIPEG, MAN.—The contract for the construction of the Gutta-Percha Rubber Co.'s building here has been let to LYALL, MITCHELL & CO., Winnipeg, at $101,000.

## MISCELLANEOUS CONTRACTS.

U. S. RECLAMATION SERVICE.—All news relative to canal projects, etc., will be found under Water Supply—Irrigation.

WHARF.—Ballard, Wash.—Contract has been let to the BRUCE CONSTRUCTION CO. for extending and enlarging the Ballard wharf, at $6,430.

*DREDGING.—Buffalo, N. Y.—Bids are asked until 11 a. m., Sept. 10, by Col. W. L. Fisk, Corps Engrs., U. S. A., for dredging in Harbor Basin at Erie, Pa.

FIRE ENGINE.—South Manchester, Conn. —The South Manchester Fire District, Frank Cheney, Jr., has appropriated $4,500 for the purchase of a chemical wagon.

DRAIN.—Des Moines, Iowa.—Contract for constructing a drain in Drainage District No. 7 (bids received on Aug. 9) has been awarded to J. C. WILSON, of Polk City, at $4,844.

EARTH FILLING.—Fort Slocum, N. Y.—John Quinn, New Rochelle, N. Y., was lowest bidder on Aug. 21, at 38 cts. per yd., for delivery only, for filling freshwater pond.

DRAIN PIPE.—New York, N. Y.—Bids are asked by the Department of Parks until 3 p. m., Sept. 2, for furnishing and delivering vitrified stoneware drain pipe (No. 1, 1909) for parks, Boro. of The Bronx.

*JETTIES.—New York, N. Y.—Bids are asked until noon, Sept. 14, by Col. S. W. Roessler, Corps Engrs., U. S. A., for erection of wood jetties for protecting east shore line at Sandy Hook, N. J.

DAM MACHINERY.—Cincinnati, Ohio.—Bids will be received by Col. Wm. T. Rossell, Corps Engrs., U. S. A., until Sept. 20 for furnishing and installing operating machinery at Dam 37, Ohio River.

DITCHES.—Logan, Iowa.—Bids are asked by the County Auditor until Aug. 28 for the construction of the Latta Ditch of 251,000 cu. yds.; also for the construction of the Hog Creek ditch of 4,400 cu. yds.

DITCH.—Hallock, Minn.—Bids will be received until Sept. 6 by C. J. Hemmingson, County Audr., for constructing county ditch No. 17 in town of Clow. Length, two miles. A. M. Gray, Engr., Crookston, Minn.

DITCH.—St. Paul, Minn.—The State Drainage Board will receive bids until Sept. 7 for the construction of a state drainage ditch in Wabasha County. Estimated cost is $11,500. G. A. Ralph is State Drainage Engr.

BRICK.—New York, N. Y.—Bids are asked by the Department of Public Charities until 2.30 p. m., Sept. 7, for furnishing and delivering 63,000 vitrified brick, equal to sample. Robert W. Hebbard is Comr.

CULVERT.—Cincinnati, Ohio.—Bids will be received until Sept. 10 by the Board County Commissioners for constructing a culvert under bridge on West Miami River Road, north of Miamitown, Whitewater Township.

STEAMER.—Ottawa, Ont.—Bids are asked by A. L. Jarvis, Act. Minister of Agriculture, Ottawa, until noon, Sept. 30, for the construction of a steel steamer for salt water quarantine service at Halifax, N. S.

COKE OVENS.—Sydney, N. S.—The Dominion Iron & Steel Co. has awarded a contract to the UNITED COKE & GAS CO., 17 Battery Pl., New York, for the construction of 120 coke ovens here. Work will start immediately.

DREDGING, ETC.—St. Louis, Mo.—Bids are asked by Lieut. C. H. Knight, Corps Engrs., U. S. A., until 11 a. m., Sept. 4, for dredging and removal of cemented gravel and small boulders in the Mississippi River, at Grand Tower, Ill.

PIERS.—North Chicago, Ill.—Bids are asked by the Bureau of Navigation, Navy Dept., Washington, D. C., until noon, Sept. 7, for the construction of harbor-entrance piers at the Naval Training Station, Great Lakes, North Chicago.

DREDGING PUMP.—St. Louis, Mo.—Bids will be received Sept. 4 by the Mississippi River Commission, 1307 Liggett Bldg., for furnishing a 24-in. centrifugal sand dredging pump, a 24-in. priming valve and a 24-in. deflecting valve.

BIN.—Binghamton, N. Y.—A. E. BADGLEY has received contract for construction of reinforced-concrete coal storage bin, 20 × 165 ft. × 40 ft. high, with trestle 200 ft. long for the Delaware, Lackawanna & Western R. R. Co. on Frederick St.

*EXCAVATION, LEVEE.—Norfolk, Va.—Bids are asked by Maj. Mason M. Patrick, Corps Engrs., U. S. A., until noon, Sept. 16, for rock and earth excavation, removing bulkhead, extending flume and reveting levee in diversion cut of Appomattox River, Va.

*DOCK.—North Hempstead, N. Y.—Bids were received on Aug. 17 by the Town Clerk for the construction of a pile and timber dock in Manhasset Bay, Port Washington, N. Y. Contract was awarded to WM. P. McDONALD, Mt. Vernon, N. Y., at $18,504.

LEVEE.—St. Louis, Mo.—The Board of Public Improvements has let the contract for furnishing the sheet piling to be used in building up the levee to protect the city water-works at the Chain of Rocks to the EMPIRE CONSTRUCTION CO., of Chicago, at $54,442.

LEVEE.—Vicksburg, Miss.—Bids were received on Aug. 9 by Capt. Clarke S. Smith, Corps Engrs., U. S. A., for constructing 26,000 cu. yds. of levee work at head of Big Sunflower River. Lowest bidders were Morrison Bros., Balesher, Miss., at 25.45 cts. per cu. yd.

TABULATING MACHINES.—Washington, D. C.—Bids were received at the office of E. Dana Durand, Dir. of the Census Dept. of Commerce and Labor, on Aug. 9 for tabulating machines. Contract has been let to SLOAN & CHASE, Newark, N. J. Estimated cost is $110,000.

DITCHES.—Webster City, Iowa.—Bids will be received until Sept. 7 by the Board County Supervisors for constructing seven tile drainage ditches, making a total of about 71,000 ft. tile of various sizes, from 6 to 26 ins. in diameter; also manholes and bulkheads. J. A. Stover, County Audr.

MONUMENT.—Sharpsburg, Md.—Bids are asked until Oct. 5 by W. W. Daugherty, Pres. Indiana Antietam Monument Comn., Room 25, State House, Indianapolis, for manufacture, erection and completion of a large monument and five markers on the battlefield at Sharpsburg, Md.

ZOO.—Memphis, Tenn.—The Park Commission, Robert Galloway, Chn., City Hall, has rejected all bids for the erection of a carnivora and elephant house at Zoo, Overton Park. L. M. Weathers, Arch., of Memphis. Bids exceeded estimate of $20,000. New bids probably will be received.

STABLE AND BOAT-HOUSE.—Boston, Mass.—F. C. ALEXANDER, Old South Bldg., Boston, has been awarded contract by the Charles River Basin Commission for construction of a stable and boat-house, at $31,967 and $14,573, respectively. Total, $46,540. Bids were opened on Aug. 19.

*SEAWALL.—Boston, Mass.—Bids are asked until 2 p. m., Sept. 3, by the Board of Harbor and Land Commissioners, Boston, for building a concrete seawall on the beach at North Scituate, in the town of Scituate, the total appropriation for the working being $1,500, less cost of supervision and incidental expenses.

TILE DITCH.—Sac City, Iowa.—Bids will be received until Aug. 26 by Harry Baxter, County Audr., for constructing a tile ditch. The work includes about 5,000 ft. 10 to 14-in. tile. Bids will also be received same place until Aug. 27 for constructing about 18,500 ft. of 8 to 14-in. tile and 10,000 ft. of 12 to 22-in. tile.

PUMPS, ETC.—Puget Sound, Wash.—The Bureau of Yards and Docks, Navy Department, Washington, has awarded contract for the installation of pumps, condensers, heaters and the necessary piping at the Navy Yard, Puget Sound, Wash., to the D'OLIER ENGINEERING CO., 121 South Eleventh St., Philadelphia, at $57,950.

CEMENT, ETC.—Montgomery, Ala.—Bids will be received by J. Craig Smith, Pres. State Convict Bureau, Montgomery, for 4,000 to 5,000 bbls. Portland cement, to be delivered as required during the construction of the dam at Speigner. Bids will also be received for structural iron, steel rods, etc. Edgar B. Kay, Engr., Tuscaloosa.

CRANE, TRACK, ETC.—Norfolk, Va.—The Bureau of Yards and Docks, Navy Department, has awarded contracts as follows for work at the Navy Yard, Norfolk, Va.: Construction of track for 40-ft. crane, ALSOP & PIERCE, Norfolk, Va., at $11,790; improvements of Building No. 16, PENN BRIDGE CO., Washington, D. C., $20,290.

STEAMER REPAIRS.—New York, N. Y.—Bids are asked by the Department of Public Charities until 2.30 p. m., Aug. 31, for furnishing all the labor and materials required for the installation of electric lighting and for making general repairs to the steamboat "Thomas S. Brennan."

Bids are asked at same time for furnishing all the labor and materials required for making general repairs to the steamboat "Fidelity."

GRAVEL, CEMENT, ETC.—New York, N. Y.—Bids are asked until 3 p. m., Sept. 2, by the Department of Parks for furnishing and delivering Roa Hook gravel or gravel of equal quality on parks and parkways, Boro. Manhattan.

Bids will be received at same time for furnishing and delivering Portland cement, building sand and broken stone for use in the conservatory lake in Central Park, Boro. Manhattan.

LIFE SAVING STATION.—Cleveland, Ohio. —Bids were received as follows on Aug. 17 by the Life Saving Service, Washington, D. C., for making repairs and improvements to the Cleveland Life Saving Station, Tenth District: The Hensham-King Co., Cleveland, $49,727; time, Dec. 30, 1910. Great Lakes Dredge & Dock Co., Chicago, Ill., $26,980; time, Jan 1, 1910. The Standard Contracting Co., Cleveland, $22,390; time, 120 days. The American Construction Co., Cleveland, $45,000; time, March 1, 1910.

ARMOR PLATE.—Washington, D. C.—Bids were received as follows on Aug. 18 for furnishing armor plate for battleships, 32 (Wyoming) and 33 (Arkansas), 11,486 tons, Class A; 910 tons, Class B; 360 tons, Class C; 130 tons, Class D; 98 tons, Class E: Midvale Steel Co., Philadelphia, (A) $420 per ton, (B) $415, (C) $470, (D) $590, (E) $512; Carnegie Steel Co., Pittsburg, (A) $420, (B) $420, (C) $460, (D) $600, (E) $600; Bethlehem Steel Co., South Bethlehem, Pa., (A) $420, (B) $418, (C) $470, (D) $587, (E) $508.

*CHANNEL.—Boston, Mass.—Bids were received on Aug. 18 by the Charles River Basin Commission for excavating a channel about 4,500 ft. long in Charles River, below Galen St. in Watertown, and for disposing of materials by filling and grading an island and the banks of the river. Contract has been awarded to BAY STATE DREDGING CO., 185 Sumner St., Boston, at $37,110.

Contract for excavating channel above Galen St. bridge, Watertown, has been awarded to CAVANAGH BROS., of South Boston, at $13,100.

*CHANNEL.—Boston, Mass.—Bids were received on Aug. 9 by the Metropolitan Park Commission, John R. Rablin, Engr., 14 Beacon St., for building concrete retaining walls for Alewife Brook channel, Cambridge, Somerville and Arlington. Contract has been awarded to BRUNO & PETITTI, of Boston, at $26,700. Other bids were as follows: W. T. Ellis, Boston, $35,335; Auguste Sancier, South Framingham, $35,075; Coughlin & Shiels Co., Boston, $32,875; D. F. O'Connell Co., Dorchester, $928,925; John J. Falvey, Boston, $28,300.

LEVEE, CULVERTS.—Dardanelle, Ark.—Bids were received on Aug. 16 by the Commissioners of Levee District No. 1 for constructing 35,000 cu. yds. of levee embankment; also for one large reinforced-concrete lock and dam and 10 reinforced-concrete culverts, varying in length from 50 to 100 ft. Contracts have been awarded as follows: Earthwork, to KEATHLEY & GATLIN, of Danville, Ark., at 15 cts. per yd.; concrete work, to the WILLIAMS-McQUARRY CO., of Fort Smith, Ark., at $10 per cu. yd. Thomas Boles is Ch. Engr., Fort Smith.

DREDGING, CULVERT.—Philadelphia, Pa. —Contracts were let on Aug. 19 by the Navy Department, at Washington, for dredging and construction work at League Island Navy Yard. The total amount of the awards exceeds $400,000. For general dredging work in the Delaware River near the mouth of the Schuylkill to the ATLANTIC DREDGING CO., of Philadelphia, two contracts; total, $102,475. For similar work in the channel approaching the Philadelphia yard below League Island, to the AMERICAN DREDGING CO., of Philadelphia, three contracts; total, $293,625. For the extension of a culvert under Broad St., north of the League Island entrance, to the AMERICAN PAVING & CONSTRUCTING CO., of Philadelphia, $23,000.

DREDGING.—Portland, Ind.—Bids will be received by the Board of Commissioners of Jay County, Portland, until 10 a. m., Sept. 7 (readvertisement), for dredging 11 miles of the Salamonie River, from Pennville to the Matamoras bridge, near Montpelier. Estimated cost, $80,000. Bids were received for this work on July 27 and Aug. 17 and rejected. Bids received on Aug. 17 were as follows: Carter Bros., Danville, Ill., $80,000; F. P. Wade, Geneva, Ind., $82,150; Ed. Bodette, Toledo, Ohio, $79,950; Mummer Contracting Co., Marion, Ohio, $77,000; C. M. Sternberg & Sons, Rensselaer, Ind., $68,500; T. Foohey Sons, Ft. Wayne, $86,000; Blodgett & Dollman, Pennville, $74,232; E. D. Barr, Pottersville, Mich., $86,000; J. H. Kissner Construction Co., Massillon, Ohio, $77,849.

BATTLESHIPS.—Washington, D. C.—Bids were received as follows on Aug. 18 by the Secretary of the Navy for furnishing battleships 32 (Wyoming and 33 (Arkansas). Bids were asked (1) under the Department's plans for hull and machinery, consisting of turbine engines; and (2) under Department's plans for hull and equipment and bidders' plans for machinery. Unless otherwise specified, speed is 20½ knots: Fore River Shipbuilding Co., Quincy, Mass., "a" bids on Babcock & Wilcox boilers with superheaters, "b" bids on Yarrow boilers without superheaters. Bid 1 on (2): Curtiss turbines, "a" steam consumption, 11,000 lbs. per knot at 12 knots, $4,797,000; "b" steam consumption, 11,360 lbs., $4,747,000. Bid 2 on (2): Curtis turbines, "a" steam consumption, 10,700 lbs., $4,922,000; "b," 10,980 lbs., $4,846,000. Bid 3 on (2): Curtiss turbines coupled with reciprocating engines, "a" steam consumption, 8,120, $4,947,000; "b" steam consumption, 8,380 lbs., $4,876,000. Bid 4 on (4): Curtis turbines coupled with electric motors, "a" steam consumption, 7,850, $5,097,000; "b," steam consumption, 8,060 lbs., $5,027,000. Time, 33 months. New York Shipbuilding Co., Camden, N. J., (1) $4,675,000; (2) reciprocating and turbine engines, $4,780,000; 20¾-knot vessel, (1) $4,750,000; (2) $4,875,000; 32 months. Newport News Shipbuilding & Dry Dock Co., Norfolk, Va., (1) steam consumption, 24.25 lbs. per I. HP. per hour at 12 knots, $4,790,000, 34 months; (2) with reciprocating engines, steam consumption, 22.5 lbs. per I. HP., per hour, $4,680,000, 33 months; (2) reciprocating and Parsons turbines, 24 lbs. steam consumption, $5,010,000, 36 months. William Cramp & Sons Ship & Engine Building Co., Philadelphia, (1) $4,450,000; (2) with turbine and reciprocating engines, $4,475,000; 32 months. New York Shipbuilding Co. and Wm. Cramp & Sons Ship & Engine Building Co. each submitted date regarding steam consumption, but same was not embodied in their bids.

## CONTRACT PRICES.

SEWERAGE EXTENSION.—Newberry, N. C.—Bids were received on Aug. 10 by the Commissioners of Public Works for the extension of sewerage and water systems. The bids in detail were as follows: (A) Walter & Wagner, (B) J. W. Gurley & Co., (C) Bowe & Page, (D) Berghous & Moffit, (E) McKay Engineering Co., (F) George W. Waring. Wilson, Sompayrac & Urquhart, Columbia, S. C., are Consulting Engineers.

| | (A) | (B) | (C) | (D) | (E) | (F) |
|---|---|---|---|---|---|---|
| 8,586 ft. 8-in. T.C. pipe, 0′ to 6′ deep | $0.35 | $0.40 | $0.25 | $0.26 | $0.41 | $0.35 |
| 3,180 ft. 8-in. " 6′ to 8′ " | .40 | .40 | .33 | .30 | .48 | .40 |
| 2,248 ft. 8-in. " 8′ to 10′ " | .50 | .50 | .42 | .43 | .59 | .50 |
| 1,760 ft. 8-in. " 10′ to 12′ " | .62 | .70 | .57 | .55 | .68 | .60 |
| 640 ft. 8-in. " 12′ to 14′ " | .85 | .90 | .65 | .64 | .91 | .75 |
| 310 ft. 8-in. " 14′ to 16′ " | 1.05 | 1.25 | 1.10 | 1.00 | 1.08 | 1.00 |
| 280 ft. 8-in. " 16′ to 18′ " | 1.25 | 1.40 | 1.30 | 1.40 | 1.25 | 1.25 |
| 170 ft. 8-in. " 18′ to 20′ " | 1.50 | 1.70 | 1.50 | 1.55 | 1.43 | 1.50 |
| 40 ft. 10-in. " 0′ to 6′ " | .40 | .41 | .35 | .35 | .52 | .40 |
| 5,090 ft. 12-in. " 0′ to 6′ " | .45 | .70 | .43½ | .43 | .65 | .55 |
| 2,760 ft. 12-in. " 6′ to 8′ " | .59 | .80 | .57 | .53 | .73 | .60 |
| 1,990 ft. 12-in. " 8′ to 10′ " | .65 | .85 | .65 | .67 | .85 | .70 |
| 1,950 ft. 12-in. " 10′ to 12′ " | .75 | .90 | .85 | .83 | .97 | .85 |
| 830 ft. 12-in. " 12′ to 14′ " | .83 | 1.30 | .97 | .99 | 1.10 | 1.00 |
| 880 ft. 12-in. " 14′ to 16′ " | 1.00 | 1.50 | 1.20 | 1.29 | 1.28 | 1.25 |
| 60 ft. 12-in. " 16′ to 18′ " | 1.41 | 1.90 | 1.60 | 1.81 | 1.45 | 1.50 |
| 50 ft. 12-in. " 18′ to 20′ " | 1.65 | 2.25 | 1.90 | 2.15 | 1.67 | 1.75 |
| 60 ft. 12-in. " 20′ to 22′ " | 2.00 | 2.50 | 2.25 | 2.67 | 1.87 | 2.00 |
| 40 ft. 12-in. " 22′ to 24′ " | 2.50 | 3.00 | 2.85 | 3.59 | 2.07 | 2.50 |
| 30 ft. 12-in. " 24′ to 26′ " | 3.00 | 3.75 | 3.00 | 4.20 | 2.30 | 2.75 |
| 50 ft. 12-in. " 26′ to 28′ " | 3.15 | 4.00 | 3.80 | 5.32 | 2.25 | 3.00 |
| 50 ft. 12-in. " 28′ to 30′ " | 3.30 | 4.50 | 4.10 | 6.37 | 2.85 | 3.50 |
| 130 ft. 12-in. " 30′ to 32′ " | 3.40 | 5.00 | 4.30 | 7.60 | 3.12 | 4.00 |
| 40 ft. 12-in. " 32′ to 34′ " | 3.50 | 5.50 | 5.00 | 8.49 | 3.52 | 5.00 |
| 500 8″ × 6″ Ys | .65 | .60 | .33 | .35 | .50 | .50 |
| 10 12″ × 6″ Ys | .75 | 1.00 | .50 | .65 | 1.00 | 1.00 |
| 31 manholes, 0′ to 6′ deep | 31.00 | 30.00 | 26.00 | 26.00 | 37.00 | 40.00 |
| 16 " 6′ to 8′ " | 33.00 | 35.00 | 31.00 | 29.00 | 45.00 | 40.00 |
| 11 " 8′ to 10′ " | 36.00 | 38.00 | 36.00 | 35.00 | 55.00 | 47.00 |
| 10 " 10′ to 12′ " | 38.00 | 45.00 | 43.00 | 42.00 | 65.00 | 47.00 |
| 3 " 12′ to 14′ " | 50.00 | 50.00 | 54.00 | 50.00 | 80.00 | 50.00 |
| 2 " 14′ to 16′ " | 59.00 | 55.00 | 65.00 | 56.00 | 95.00 | 50.00 |
| 1 " 16′ to 18′ " | 64.00 | 60.00 | 75.00 | 62.00 | 110.00 | 85.00 |
| 1 " 20′ to 22′ " | 69.00 | 70.00 | 83.00 | 75.00 | 145.00 | 85.00 |
| 1 " 24′ to 26′ " | 75.00 | 80.00 | 96.00 | 95.00 | 175.00 | 85.00 |
| 8 connections for drop manholes | 5.00 | 3.00 | 4.00 | 5.00 | 8.50 | 5.00 |
| 9 flush tanks | 60.00 | 60.00 | 60.00 | 61.00 | 66.00 | 75.00 |
| 36 ft. 8-in. cast-iron pipe | .70 | .95 | .80 | .85 | .89 | .80 |
| 228 ft. 12-in. cast-iron pipe | 1.12 | 1.30 | 2.25 | 3.00 | 1.40 | 1.00 |
| 50 (300′) deep cut house connections | .10 | .40 | 2.00 | 4.50 | 1.80 | 3.00 |
| 6 (60′) changing house connections | ... | 40.00 | 4.00 | 1.50 | 3.60 | 10.00 |
| 3 tearing out old manholes | ... | 20.00 | 1.00 | 1.00 | 6.00 | .. |
| 4 connections with old manholes | ... | 5.00 | 4.00 | 1.00 | 6.00 | .. |
| Rock excavation | 3.00 | 4.50 | 4.00 | 3.75 | 3.60 | 3.50 |
| Brick for abutments, etc. | 14.00 | 15.00 | 16.00 | 15.00 | 20.00 | 18.00 |
| Timber for piling, etc. | 12.00 | 25.00 | 30.00 | 25.00 | 30.00 | 20.00 |
| Concrete for pipe foundations, etc. | 8.00 | 10.00 | 7.50 | 9.00 | 10.00 | 7.50 |
| Septic tank and filters, complete | ... | .. | .. | .. | .. | .. |
| 3,240 ft. 4-in. cast-iron water pipe | .45 | .55 | .50 | .51 | .53 | .30 |
| 200 ft. ¾-gallon iron water pipe | .05 | .20 | .12 | .15 | .15 | .10 |
| 6 fire hydrants | 25.00 | 26.00 | 30.00 | 29.00 | 30.00 | 25.00 |
| 4 bell end gate valves | 8.50 | 10.00 | .30 | 12.00 | 11.20 | 20.00 |
| Total | $36,239 | $42,018 | $34,623 | $39,080 | $40,783 | $36,865 |
| | | | | Less 5% | 2,039 | |
| | | | | | $38,744 | |
| Time for completion | 6 mo. | 9 mo. | July 1, 1910. | Sept. 1, 1910. | June 1, 1910. | Apr. 1, 1910. |

## U. S. POSSESSIONS.

LUMBER.—Panama.—Bids are asked by the Isthmian Canal Commission, Washington, D. C., until 10.30 a. m., Aug. 31, for furnishing lumber (Circular No. 532).

STEEL TUGBOAT.—Panama.—Bids are asked by the Isthmian Canal Commission, Washington, D. C., until 10.30 a. m., Sept. 20, for furnishing one steel tugboat (Circular No. 533).

TIES.—Panama.—Bids were received as follows on Aug. 20, by the Isthmian Canal Commission, Washington, for furnishing 10,000 No. 1 and 25,000 No. 2 ties, yellow pine, cypress, or Douglas fir: A. S. Bacon & Sons, Savannah, Ga., No. 1, 88 cts.; No. 2, 78 cts.; 150 days delivery, pine and cypress; G. S. Baxter & Co., 15 William St., New York, No. 1, 92 cts.; No. 2, 87 cts.; cypress, 40 days. If contractor be not required to keep ties separate, he will furnish them for 89 and 84 cts., respectively. G. Elias & Bro., Buffalo, N. Y., No. 1, 97 cts.; No. 2, 92 cts.; 120 days, pine and cypress. W. R. Grace & Co., 614 California St., San Francisco, No. 1, 94 cts.; No. 2, 65 cts.; Douglas fir, 90 days; delivered Balboa. All deliveries Colon, unless specified otherwise.

AIR COMPRESSOR, ETC.—Panama.—Bids were received as follows on Aug. 23, by the General Purchasing Officer, Isthmian Canal Commission, Washington, for furnishing two air compressors having horizontal duplex steam and compound air cylinders capable of compressing 2,500 cu. ft. of free air per minute to a 100-lb. gage pressure when working non-condensing under a steam pressure of 125 lbs.: Allis-Chalmers Co., Milwaukee, Wis., $20,000; Chicago Pneumatic Tool Co., Chicago, $13,600; Drew Machinery Agency, Manchester, N. H., $18,760; Ingersoll-Rand Co., 11 Broadway, New York, $18,220, $15,640, $14,436; Janesville Iron Works, Hazelton, Pa., $10,500, with bed plates, $11,300; Laidlaw-Dunn-Gordon Co., New York, $13,130, $12,360.

Also for ten drilling machines for drilling well, with complete sets of spare and repair parts: Cyclone Drill Co., Orrville, Ohio, $12,783; Rockford Well Drill Co., Rockford, Ill., $16,001; Star Drilling Machine Co., Akron, Ohio, $13,219.

**Readers' Wants**

**If you are in the market for material, equipment or supplies, and fail to find it in our advertising pages, send us full particulars, and we will gladly put you in touch with the right parties.**

INDUSTRIAL RAILWAYS.—Long Branch, N. J.—Gifford, Lacour, Cranmer & Co. write us for a list of manufacturers of portable track and cars.

HYDRAULIC ELEVATORS.—Little Falls, N. Y.—The Berrigan Contracting Co. write us for information concerning hydraulic elevators for manufacturing plants.

FUEL OIL BURNERS AND ROTARY KILNS.—Nichols, Fla.—We are requested by R. DeC. Greene, Consulting Engineer Phosphate Mining Co., to place him in touch with manufacturers of oil burners as well as rotary kilns.

GASOLINE ELECTRIC MOTOR CAR.—Vicksburg, Miss.—We are in receipt of a letter from R. D. Betts, 805 E. Clay St., in which he requests the names of manufacturers of gasoline electric motor cars for interurban service.

TRADE CATALOGS.—Calgary, Alta.—Smith, Kerry & Chace, consulting engineers, of Toronto and Winnipeg, who have recently opened offices at 68 McDougall Block, Calgary, in order to deal more conveniently with their business in that section of the West, would be glad to receive catalogs of electrical and engineering supplies at that address.

CATALOGS.—North China.—We are in receipt of a letter from Mr. S. S. Young, Pres., Tangshan Engineering & Mining College, Tangshan, North China, which states: "In connection with the catalog department of our library, we should like to have copies of catalogs sent us in permanent filing covers by your advertisers. This college is at present the highest and largest engineering institution in China and is under the direct control of the Imperial Ministry of Posts and Communications. We consider it a very important part of the education of our students to know where to send for standard materials and machinery when they are drafted out into the various Government railways and other engineering works. It is for this reason that we have established our catalog department. So far we have a stock of British catalogs, but none from American manufacturers, and it would be to the advantage of American manufacturers to have their stock brought to the notice of Chinese engineering students in view of the present development of commerce between our country and yours."

## INDUSTRIAL NOTES.

THE DIMMICK PIPE CO., Birmingham, Ala., announces that it has reopened its Chicago branch office at 431 The Rookery, in charge of Mr. J. R. Rice.

THE TOMKINS COVE STONE CO. is making plans for the erection of a new plant which will include Edison crushing rolls and an extensive system of belt conveyors. Construction has already commenced and the plant will be in operation by May 1, 1910.

J. J. HARRELL, 224 So. Clark St., Chicago, is putting on the market a cement composition for roofing, fireproofing and waterproofing; it is adaptable also as a protective paint for steel work and has been used for fitting up the joints in screw and flanged pipe work.

MR. J. E. McAFEE, Michigan Manager for William B. Hough Co., dealers in construction machinery and reinforcing steel, Chicago, who has been operating from the home offices in Chicago, is establishing his headquarters at Detroit in order to handle the field to better advantage.

MR. A. N. DOUD, the inventor of Doud's "Acme" Center Dump Bucket, and also the Special Controllable Feed Concrete Bucket, with chute and spreader attachments, a description of which appeared in a previous issue of the Engineering News, is now associated as Engineer with the Acme Equipment & Engineering Co., of Cleveland, Ohio.

THE SOUTHERN ENGINEERING CO. has recently been incorporated under the State Laws of Arkansas with general offices at Texarkana, Ark. The company proposes to act as manufacturers' agents for gas, steam, electrical equipment and supplies, and the incorporators are J. Graham Miller, C. E., Pres.; J. M. Walshe, Vice-Pres., and H. M. Barney, Secy. and Treas.

H. M. BYLLESBY & CO., engineers, of Chicago, announce their removal from the American Trust Building to temporary offices at Dearborn and Monroe Sts. The change is made necessary by the requirements of additional space by the consolidation of the American Trust & Savings Bank and the Continental National Bank. The company will return to new permanent quarters in the American Trust Building on June 1, 1910.

THE ALLIS-CHALMERS CO., Milwaukee, Wis., reports that among recent sales of heavy electrical machinery is a contract covering two 3-phase, 25-cycle, 6,600-volt alternating-current generators, with a combined capacity of 8,000 KW., to be direct-coupled to gas engines in the power plant of the Carnegie Steel Co.'s Carrie furnaces at Rankin, Pa. These are said to be the largest machines ever built for service of this character.

THE ABERTHAW CONSTRUCTION CO., Boston, Mass., has recently taken contract for adding three stories to the Crocker warehouse, Cumberland Ave., Portland, Maine, owned by the Portland Savings Bank, E. F. & F. H. Fassett, Architects. The existing building is a 5-story reinforced-concrete structure which the Aberthaw Co. erected several years ago. The columns will be reinforced to carry the extra weight of the additional floors, and the building completed to corespond with its existing design.

THE WESTINGHOUSE STORAGE BATTERY CO., which was incorporated July 12, has acquired all of the plant, patents and equipment of the storage battery department of the Westinghouse Machine Co. and of the General Storage Battery Co., and will manufacture, at Boonton, N. J., both the Westinghouse and Bijur types of storage battery for those classes of service in which each has proven superior. The general offices of the company will be located at Boonton, N. J., with sales offices in the principal cities of the country.

THE GARWOOD ELECTRIC CO. announces that it has appointed the Tucker Electric Co., of 970 Old Colony Bldg., Chicago, as its selling agent for the city of Chicago and as far south in Illinois as a line drawn east and west through Springfield and including Springfield and as far in Wisconsin as a line drawn east and west through Madison and including Madison and that portion of Indiana north of a line drawn east and west through Indianapolis and including Indianapolis. The Garwood Co. also announces that it has appointed Fellows & Fellows, Lawler Bldg., Toronto, Canada, as its sales agents. Their territory includes the entire Dominion of Canada.

THE FIRST "S. & N." BEAM SHEAR for cutting Bethlehem beams will be installed in the plant of the New England Structural Co. in East Everett, Mass. The "S. & N." Shear has been in successful operation in Germany, where the Differdingen Mills are rolling beams under the Gray patents. The machine, which will be in operation in about eight weeks, has the following capacity: Standard I beams 7 to 20-in., 80 lbs. Bethlehem B sections up to 18-in. and with special tools B20 and B20a. Channels up to 15-in. and angles up to 6 × 6 × ¾-in. The machine requires 20 HP. for its maximum capacity, making a cut in 15 to 25 secs. The weight of the machine is 20,000 lbs. Dimensions: Length, 12 ft., width, 4 ft., and height, 9 ft. The frame consists of two steel plates, thickness of which is 1⅛ ins. after machining. Around the opening the frame is reinforced to 2⅜ ins. The gears are of cast steel and have cut teeth. The operation is simple. The upper knife penetrates the beam to be cut from the outside and goes through it at a great speed. No handling required after the beam has been placed upon the knives. The "S. & N." Beam Shears are built by Messrs. Schulze & Naumann in Coethen, Germany. Their American agents are the Wiener Machinery Co., of 50 Church St., New York City.

## TRADE PUBLICATIONS.

ORE TESTING.—General Engineering Co., Salt Lake City, Utah. Paper; 6 × 9 ins.; pp. 43; illustrated.

This company here describes their facilities for custom testing of ores of all kinds.

OFFICE EQUIPMENT.—Berger Mfg. Co., Canton, Ohio. Catalog No. 6023. Paper; 6 × 9 ins.; pp. 71; illustrated.

An extensive line of steel filing devices and office equipment is shown in this catalog.

FURNACES.—Rockwell Furnace Co., 26 Cortlandt St., New York City. Paper; 16 x 11 ins.; pp. 12; illustrated.

This publication consists wholly of halftone illustrations of Rockwell furnaces in all sorts of industrial plants.

IMPULSE WATER WHEELS.—Pelton Water Wheel Co., San Francisco, Cal. Paper; 6 × 9 ins.; pp. 116; illustrated.

This catalog gives a general discussion of the Pelton designs of high-grade, impulse water wheels and shows numerous installations.

CONCRETE PAVING.—Marquette Cement Mfg. Co., Marquette Bldg., Chicago. Paper; 9¼ × 6 ins.; pp. 16; illustrated.

This pamphlet gives the specifications for concrete street pavement at Fond du Lac, Wis. (Mr. J. S. McCullough, City Engineer), and a number of views of the work in that city.

SILENT CHAIN DRIVE.—Link-Belt Co., 299 Broadway, New York City. Bulletin No. 84. Paper; 6 x 9 ins.; pp. 12; illustrated.

This bulletin presents illustrations, showing a great variety of applications of the "maximum" silent chain, which is of the Renold type.

PUMPS.—C. N. Wheeler Manufacturing Co., Philadelphia. Bulletin 10. Paper; 6 x 3 ins.; pp. 16; illustrated.

The most recent designs of vacuum and pressure pumps, reciprocating and rotary, for all sorts of services, are presented in miniature.

COAL CUTTING MACHINERY. — Jeffrey Manufacturing Co., Columbus, Ohio. Bulletin No. 18-A. Paper; 8 x 10 ins.; pp. 13; illustrated.

The Jeffrey air-power coal cutter of the chain type is described in this bulletin. Photographic illustrations show the cutter at work in the mine.

SCREW JACKS.—Topping Bros., 122 Chambers St., New York City. Paper; 5 x 7¾ ins.; pp. 23; illustrated.

Burrows ball-bearing jacks are described in this publication and its construction is clearly shown by general and sectional illustrations. A price list is included for jacks with capacities of from 15 to 50 tons.

HYDRAULIC TURBINES.—The Trump Manufacturing Co., Springfield, Ohio. Paper; 9 × 6 ins.; pp. 84; illustrated.

Installations of various types of hydraulic turbines are pictured throughout this catalog and are accompanied by a running discussion of the merits of various features, in three languages—English, Italian and Scandinavian.

STEAM TURBINES.—E. W. Bliss Co., 17 Adams St., Brooklyn, N. Y. Paper; 7 × 9 ins.; pp. 10; illustrated.

The mechanical design of the details of a type of nozzle-expansion turbine, evidently for comparatively small sizes only, are described and pictured. There is no indication, however, of dimensions or capacities of the turbines.

AUTOMOBILE VOLT-AMMETER. — Hoyt Electrical Instrument Works, Penacook, N. H. Paper; 3½ x 6 ins.; pp. 8; illustrated.

This shows the use of an instrument for indicating current and voltage of the battery outfits for gas-engine ignition—one better than the cheap pocket instruments commonly used.

EXHAUST FANS. — Crocker-Wheeler Co., Ampere, N. J. Bulletin 112. Paper; 7 × 10 ins.; pp. 3; illustrated.

Motor-driven exhaust fans for ventilating factories, stores, public buildings, kitchens, etc., are herein described. The sizes vary from 18 to 42-in. diameters, capable of moving from 2,700 to 15,400 cu. ft. of air per min. The dimensions of fans, motors and frames are given.

RECORDING GAGES.—The Bristol Co., Waterbury, Conn. Bulletin 104. Paper; 8 × 10½ ins.; pp. 39; illustrated.

This is entitled a "Preliminary Bulletin of Pressure and Vacuum Recording Gages of all Commercial Ranges." The book contains a few pages disclosing the simple design of the Bristol gages and many pages of sections from charts for nearly every possible range and system of units.

GAS PRODUCERS.—Smith Gas Power Co., Lexington, O. Bulletin 4. Paper; 6 x 9 ins.; pp. 30; illustrated.

The features of the designs of suction and pressure types of gas producers and appurtenances are described and illustrated. There is a little additional matter on plant layout and comparative costs of power productions.

SKYLIGHTS.—G. Drouvé Co., Bridgeport, Conn. Paper; 6 × 9 ins.; illustrated.

The "Anti-Pluvius" puttyless skylight and the Lovell window operator are described in this booklet. In this skylight, the frame is of steel channels with cow-hair felt cushions for the glass to rest upon. Bridge bars supported on the studs that secure the panes make it possible to walk across the skylights for cleaning or repairing.

INDUSTRIAL PLANTS.—C[illegible] Snow Co., Cleveland, O[illegible] Bartlett & Catalog 30. Paper; 6 x 9 ins.; pp. 1[illegible] illustrated.

This catalog is largely m[illegible]up of illustrations of plants built b[illegible] concern. There are installations of c[illegible]handling machinery at collieries and [illegible]er plants, mechanical dryers, rock an[illegible] crushers, lime, plaster and paint mac[illegible]y, garbage destructors, etc.

LEAK-NO METALLIC COM[illegible]ND—H. W. Johns-Manville Co., 100 W[illegible]m St., New York City. Folder; 3½ [illegible] ins.; illustrated.

The product, the method o[illegible]plication of which is described in this [illegible], is warranted to "stop any ordinar[illegible]ak in iron or steel against any pressur[illegible] oil, steam, gas, air, ammonia or water, [illegible]d to stand any heat or chemicals that ir[illegible] will stand."

RETAIL COAL POCKETS.—[illegible]k-Belt Co., 299 Broadway, N. Y. N[illegible]2. Paper; 6 x 9 ins.; pp. 52; illus[illegible]d.

Illustrations show a numbe[illegible] coal pockets installed by the Link-Bel[illegible]., and are accompanied by brief notes e[illegible]ining their operation and calling attenti[illegible] to distinguishing features of constructi[illegible] There are a number of sectional draw[illegible]s of coal pockets, showing typical arr[illegible]ements of their conveying machinery.

CONCRETE MIXERS, CARS AND BUCKETS.—The Ohio Ceramic Engineering Co., Cleveland, O. Paper; 3½ × 6 ins.; pp. 8; illustrated.

The mixing plants are stationary and portable, comprising an engine and a McKelvey drum mixer on one frame. The cars and buckets are of steel; the latter include a dumping bucket for elevator hoists, a drop bottom bucket, and a bucket with V-shaped bottom for controllable discharge.

CHANNELING MACHINES.—Ingersoll-Rand Co., 11 Broadway, New York City. No. 6002. Paper; 6 × 9 ins.; pp. 7; illustrated.

The "electric-air" principle, as adapted to channeling machines, is discussed here. An electric motor drives a piston working in a cylinder without valves. The cylinder is connected to the cutter engine by air piping and the cutter is operated by the pulsations of air.

HOW TO SAVE COAL.—The Green Fuel Economizer Co., Matteawan, N. Y. Bulletin No. 122; 3½ x 5½ ins.; pp. 16; illustrated.

The Green Fuel Economizer is a steam-plant accessory designed to extend the boiler heating surface. This booklet describes its general construction and also certain improved features, such as the extended top header, the bottom header and the sectional covering.

ELEVATING GRADERS.—The Austin Mfg. Co., Chicago. Paper; 10¾ × 8 ins.; pp. 12; illustrated.

This pamphlet relates to the New Era grader, and shows its use on various kinds of work depositing the excavated material either into wagons or upon a spoil bank. The illustrations show the machines in use abroad as well as in railway, canal and street work in this country. A dump wagon for contractors is included.

PATENT LAW.—A. C. Fraser & Usina, 170 Broadway, New York City. Bulletin 6. Paper; 6 × 9 ins.; pp. 15.

This bulletin is one of several issued at irregular intervals, to clients of this firm of patent lawyers, to keep these clients advised of important developments and decisions. This particular bulletin discusses the new copyright law, the trade-mark situation, the Golding expanded-metal patent and patent revocation in Great Britain.

ELECTRIC RAILROAD.—General Electric Co., Schenectady, N. Y. Bulletins 4673 and 4678. Paper; 8 × 10½ ins.; pp. 10 and 2.

Bulletin No. 4673 describes the Pittsburg, Harmony, Butler and New Castle Railway, a 1,200-volt, direct-current line. A fairly complete description of equipment and operation is included.

No. 4678 describes the main-circuit car switch for common outfits of under 250-HP. motor capacity.

STREET-CAR PLATFORM GUARD.—Meyer Safety Guard Co., 615 Bee Bldg., Omaha, Neb. Paper; 9 × 6 ins.; pp. 16; illustrated.

The Meyer safety guard, described in this booklet, is intended to prevent boarding and alighting accidents to passengers on street cars. It consists of a guard railing which is supported from the car roof by a jointed frame. It may be raised when the car stops by the motorman or conductor from any part of the car. The guard is so shaped that it does not interfere with passengers standing on the car step either when closed or while opening.

DRAG SCRAPERS.—Fresno Agricultural Works, 2202 Tulare St., Fresno, Cal. Paper; 6 x 9 ins.; pp. 2; illustrated.

The Fresno scraper is wide, deep and short, instead of the ordinary bowl pattern. It has shoes upon which it rides when empty, and is made in sizes for two, three and four horses. It has been used extensively in railway, ditch and other work.

SCRAPER EXCAVATOR.—H. Channon Co., Chicago, Ill. Paper; 7¾ x 10½ ins.; pp. 32; illustrated.

This excavator is a revolving derrick handling a scraper bucket by a hauling line (for making a cut toward the machine) and a hoisting line. The illustrations show the machine at work on railway and canal construction, etc.

WIRE ROPE.—A Leschen & Sons Rope Co., 920 North First St., St. Louis, Mo. Paper; 7 x 6 ins.; pp. 8; illustrated.

This folder presents photographs of the Cathedral of St. John the Divine, now under construction in New York City. It is stated that "Hercules" wire rope was used by the contractors who erected the large stone piers and arches which are to support the central tower of the cathedral.

TURBINE PUMPS.—Lea Equipment Co., 90 West St., New York City. Bulletin H. Paper; 6 x 9 ins.; pp. 8; illustrated.

Two pages contain a description of the chief features of Lea high-duty turbine and volute pumps, and the rest of the pamphlet is given up to half-tone illustrations, showing two, three and four-stage pumps, direct connected to motors or arranged for belt drive.

SCRAPER GRADING MACHINE.—The Bagley Grader Co., Tacoma, Wash. Paper; 8½ x 11 ins.; pp. 4; illustrated.

This machine has a scraper bucket operated from a stationary engine by a hauling cable and a backhaul cable, the latter being led through a snatchblock, anchored at a point ahead of the work. Particulars are given of the methods of working, the force required, amount of material handled and cost of work.

STREET FLUSHING MACHINES.—The D. Connelly Boiler Co., Cleveland, O. Paper; 6¼ x 9¾ ins.; pp. 12; illustrated.

In this machine the water-works hydrant pressure is utilized for compressing the air, which gives the necessary force for operating the flushing stream thrown by the machine. An adjustable nozzle is used, capable of being set to throw spray at 16 different angles. It is stated that 13 of the machines are now in use in Cleveland, 6 in Detroit, 5 in Columbus, and varying numbers in a dozen other cities.

AERIAL TRAMWAYS.—Trenton Iron Co., Trenton, N. J. Paper; 6 x 8 ins.; pp. 64; illustrated.

The use of the Bleichert system of aerial tramways for carrying ore, rock and supplies is interestingly set forth by Mr. William Hewett, M. E. The present practice of this company is taken up under the headings: "Track Cables," "Traction Rope," "Rolling Stock," "Supports," "Stations." There are also sections on cost of operation and reversible carriers.

TURBINE PUMPS.—Atlantic Hydraulic Machinery Co., Drexel Bldg., Philadelphia. Bulletins 1, 2 and 3. Paper; 8 x 10 ins.; pp. 2 each; illustrated.

This company has recently been organized to develop and manufacture a new line of turbine pumps, which are claimed to be light, cheap, durable and of increased efficiency over common designs. One bulletin is on "Standard Pumps"; another is on "Multi-stage," and the third is on "High-Speed, Low-Lift Types."

HYDRAULIC JACKS.—Joyce Cridland Co., Dayton, Ohio. Bulletin No. 33. Paper; 4 x 9 ins.; pp. 32; illustrated.

This bulletin contains information concerning the operation of hydraulic jacks and sectional views showing the internal construction and valve action. It also describes a new speeding device by means of which the jack can be run quickly up to load, where the speeding device automatically cuts out, and leaves the lifting pump only in operation.

ROCK CRUSHERS AND ROAD-BUILDING Machinery.—Acme Road Machinery Co., Frankfort, N. Y. Catalog No. 7. Paper; 6 x 9 ins.; pp. 45; illustrated.

This special crusher catalog calls particular attention to certain new features of the new model solid steel crusher. Of the ten sizes of this machine all but the largest three are mounted on four-wheeled roller-bearing steel trucks. Other kinds of machinery described are folding steel-pan elevators, portable bins and revolving shaft screens.

EARTH AND STONE HANDLING MACHINERY.—Western Wheeled Scraper Co., Aurora, Ill.; 10 x 6 ins.; pp. 120; illustrated.

A vast variety of devices and machines are now being made for the more efficient handling of earth, both in excavation and in fill. This catalogue lists a number that the company makes, among which are wheeled scrapers, drag-scrapers, elevating graders, ditchers and wagon loaders, plows, rock and ore crushers, dump cars, street sweepers and garbage carts.

ROAD-MAKING AND EXCAVATING MACHINERY.—Indiana Road Machine Co., Fort Wayne, Ind. Paper; two pamphlets; 9 x 6 ins.; pp. 47; 10 x 6¾ ins.; pp. 24; illustrated.

The first of these pamphlets includes road graders, horse rollers, stone crushing and screening outfits, portable and traction engines, scrapers, dump cars and rock drills. The second is devoted mainly to the National elevating grader and dump wagon. A small folder describes road drags, built of steel.

CORRUGATED LOCOMOTIVE FIREBOXES.—Wm. H. Wood Locomotive Firebox & Tube Plate Co., Media, Pa. Paper; 11 x 6½ ins.; pp. 16; illustrated.

The firebox is made of a corrugated plate forming the sides and crown, being bent to the required cross section and having its edges riveted to the mud rings. The purpose is to provide means for taking up expansion and contraction movements. The staybolts are in the flat portions between the corrugations. Special riveting and flanging machines are shown.

BLOWERS.—American Blower Co., Detroit, Mich. Paper; 7 x 9 ins.; pp. 24; illustrated.

This catalog is largely devoted to comparisons of "Sirocco" blowers with the older and more familiar design. The distinguishing feature is in the runner or blast wheel, which is a drum with a large inlet opening. There are many long (axially) but narrow blades in place of the few wide ones of an ordinary plate blower. For a given size of runner at equal speeds the new design is claimed to deliver about four times the volume of air of the old.

**For other Proposal Advertisements see pages 51, 52, 53, 54, 56, of Advertisements and Construction News page 80.**

## BRIDGES.

THE SANITARY DISTRICT OF CHICAGO.

TO CONTRACTORS.

Sealed proposals, addressed to the Board of Trustees of The Sanitary District of Chicago, and indorsed "Proposals for the Erection of Highway Bridges," will be received by the Clerk of the said Sanitary District at the offices of the said District, on the fifteenth floor of the American Trust Building, Chicago, Illinois, until 12 M., Standard Time, on Wednesday, September 8, 1909, and will be publicly opened by the Board of Trustees at a meeting to be held on that day, or the first meeting thereafter.

The work for which said tenders are invited, consists of the Erection and Completion of the Superstructures of Highway Bridges crossing the North Shore Channel of The Sanitary District of Chicago, located as follows:

On the line of Isabella Street, in the city of Evanston, Illinois.

At Lincoln Street, in the city of Evanston, Illinois.

The superstructure metal work for each bridge will be furnished by The Sanitary District of Chicago and delivered at the site of the bridge.

Said work is to be executed in accordance with plans, specifications and contract furnished by The Sanitary District of Chicago, which plans, specifications and contract may be obtained upon application at the said office of the said District.

Each bid must be accompanied by a certified check or cash to the amount of Four Hundred ($400.00) Dollars. All certified checks must be drawn on some responsible bank doing business in the City of Chicago, and shall be made payable to the Clerk of The Sanitary District of Chicago. Said amount of Four Hundred ($400.00) Dollars, deposited with bids, shall be held by the Sanitary District until all of the respective bids for said structure have been canvassed and the contract awarded and signed. The return of said check or cash to the bidder to whom said work shall have been awarded will be conditioned upon his appearing within ten (10) days after receiving notice of such award, with bondsman, and executing a contract with the Sanitary District for the work so awarded, and giving a bond, satisfactory to the Board of Trustees, for the fulfillment of said contract for the erection and completion of said bridges in the amount of Three Thousand ($3,000.00) Dollars.

All bids must be upon blank forms furnished by the Sanitary District.

Bidders are required to state in their bids their individual names and places of residence in full.

The said Board of Trustees reserves the right to reject any and all bids.

THE SANITARY DISTRICT OF CHICAGO.

By ROBERT R. McCORMICK,
Pres. of Its Board of Trustees.

Attest:
I. J. BRYAN, Clerk.
Chicago, August 25, 1909.

## SEWAGE DISPOSAL PLANT.

Huntingdon, Pa., Aug. 23, 1909.

Sealed proposals will be received at the office of the General Superintendent of the Pennsylvania Industrial Reformatory, Huntingdon, Pa., until 2 o'clock P. M. on the sixth day of September, 1909, for constructing a sewage disposal plant and storm water sewers at the Pennsylvania Industrial Reformatory, Huntingdon, Pa.

Terms of proposals, copies of the specifications and instructions to the contractors may be obtained of the General Superintendent or the Engineer, and the plans may be seen at their offices.

The Board of Managers reserve the right to reject any and all bids.

Address T. B. PATTON,
General Superintendent,
Huntingdon, Pa.

J. MURRAY AFRICA,
Engineer, Huntingdon, Pa.

## PAVING, MACADAMIZING AND SEWERS.

Beckley, Raleigh Co., W. Va.,
August 21, 1909.

Sealed proposals will be received by the City Council from Aug. 23 until Sept. 16 for the construction of three and one-half miles of Limestone Macadam Road, three and one-half miles of Concrete Macadam Road, 3,000 square yards of Brick Pavement, and 10,000 feet of ten and twelve-inch Sewers, etc.

Plans, specifications and blank form for proposal can be had on application to the City Engineer, F. A. Cloud.

G. C. HEDRICK,
City Recorder.

## PAVING.

Ashland, Ky.

Sealed proposals will be received by the City Clerk of the City of Ashland, Kentucky, up to 7 o'clock P. M., Monday, September 13th, 1909, for the furnishing of all materials for and the construction of vitrified brick pavement with concrete curb and gutter and header for same, as per plans and specifications approved by the City Council of the City of Ashland, Kentucky, and on file in the office of the City Engineer.

The approximate quantities are:

44,860 square yards of paving.

24,490 lineal feet combine curb and gutter, and necessary catch basins for same.

4,000 lineal feet of concrete header.

A certified check on a National Bank, payable to L. R. Putnam, City Treasurer, for the sum of One Thousand ($1,000) Dollars, must accompany each proposal. The right is reserved to reject any and all bids.

Mark bids for paving Front Street, from 13th to 23d, 19th, 20th, 21st and 22d Streets, from Front Street to Greenup Avenue; 23d Street, from Front Street to Winchester Avenue; Winchester Avenue, from the end of present pavement at 32d Street to the City Limits; 29th Street, from the south end of the undergrade crossing to south side of Lexington Avenue; Central Avenue, from 29th Street to the west side of 32d Street.

Address same to E. A. Shepard, City Clerk of the City of Ashland, Kentucky.

J. O. MATHEWSON, Mayor.
E. A. SHEPARD, Clerk.
L. R. PUTNAM, Treasurer.

## WATER-WORKS SYSTEM.

Marietta, Ga.

Sealed proposals will be received by the Board of Water Commissioners of the City of Marietta, Ga., until 8.00 P. M., September 20th, 1909, for furnishing all materials, machinery and constructing a system of wate-works in and for the City of Marietta, Ga.

The Water-Works System will embrace approximately 1,400 tons of cast-iron pipe, from 4 to 14 ins., 67 valves, boxes, etc., 122 hydrants, one 40-ft. diameter and 50-ft. high reinforced concrete or steel standpipe, one 1,000,000-gallon compound pumping engine, one 1,500,000-gallon 2-stage centrifugal pump with 100-HP. motor, one 1,000,000 centrifugal pump with 75-HP. motor, one 150-KW. generator, direct connected to Corliss or 4-valve engine, with switchboard exciter, etc., two 66 x 18 boilers with heater and feed pump, cross flue and stack one brick building, two 500,000 reinforced concrete filters, one reinforced concrete clear-water basin, one reinforced concrete coagulation basin, one 5,000,000-gallon storage basin, one 2,000,000 storage basin, small concrete and earth dam with 5,000 ft. of 15-in. terra cotta gravity line.

Plans may be seen at the office of the City Clerk or the Engineers and copies of the specifications, forms, etc., may be obtained from the Engineers or City Clerk. The right is reserved to reject any or all bids.

DR, S. D. RAMBO, Chairman,
Board of Water Commissioners.

J. B. McCRARY & CO., Engineers,
1301-2 Empire Bldg.,
Atlanta, Ga.

OFFICE OF THE CONSTRUCTING QUARTERMASTER, Fort Yellowstone, Wyoming, August 18th, 1909.—Sealed proposals, in triplicate, for constructing, plumbing, heating and electric wiring hospital building, will be received here until 2 o'clock P. M., September 7th, 1909, and then publicly opened. Certified check or Surety Company's guarantee for 10 per cent. of the amount must accompany each bid. Plans, specifications, blank proposals and further information furnished upon application. A deposit of $10.00 required on each set of plans and specifications loaned. The U. S. reserves the right to reject any or all bids. Envelopes containing proposals should be marked "Proposals for Constructing, Plumbing, Heating and Electric Wiring Hospital Building," and addressed to LIEUTENANT G. C. SMITH, Constructing Quartermaster.

OFFICE OF THE CONSTRUCTING QUARTERMASTER, Fort Morgan, Alabama, August 20th, 1909.—Sealed proposals in triplcate will be received at this office until 1:30 P. M., September 20th, 1909, for the construction of Terra Cotta Pipe Sewers and Iron Outfall Pipe at Fort Morgan, Ala. Plans, specification, blank proposals and further information furnished on application. A deposit of $10.00 required for drawings and specifications, deposit will be returned to the bidder on return of drawings here. Plans and specifications may be seen at this office. The United States reserves the right to reject or accept any or all bids or any part thereof. Proposals to be marked "Proposals for Construction of Sewers" and addressed to CAPTAIN H. B. CHAMBERLIN, Quartermaster, U. S. Army, Constructing Quartermaster.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C. August 17, 1909.—Sealed proposals will be received at this office until 3 o'clock P. M., on the 28th day of September, 1909, and then opened, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. Post Office at Woonsocket, Rhode Island, in accordance with the drawings and specification, copies of which may be obtained from the Custodian of site at Woonsocket, R. I., or at this office at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

## ASPHALT PAVING.

Bayonne, N. J., Aug. 23, 1909.

Sealed proposals will be received and opened by the Council of the City of Bayonne, N. J., at a meeting to be held in the City Hall on Tuesday, Sept. 7, 1909, at 8.00 P. M., for all of the labor and material for asphalt pavements and appurtenances on the following streets:

16th St., from Broadway to Ave. E; bond, $2,000; time for completion, 20 days.

25th St., from Broadway to Ave. E; bond, $3,000; time for completion, 30 days.

27th St., from Ave. A to Ave. E; bond, $6,000; time for completion, 60 days.

45th St., from Ave. B. to Ave. E; bond, $6,000; time for completion, 60 days.

There will be required in all about 19,-

000 sq. yds. of asphalt paving, together with curbing and other appurtenances.

All bids must be in the regular forms provided for the purpose; plans and specifications for the work are on file in the office of the City Surveyor, where blank forms of proposal or any further information can be obtained.

The Council reserves the right to reject any or all bids.

W. C. HAMILTON,
City Clerk.

## PAVING.

Herkimer, N. Y.

Pursuant to a resolution, duly adopted by the Board of Trustees of Herkimer, New York, sealed proposals for Paving Eastern Ave. with Brick, Bitulithic, or other pavement, also for laying Storm Sewer will be received by said Board of Trustees until eight o'clock in the afternoon of Tuesday, August 31, 1909, at which time said proposals will be opened and read. The right is hereby reserved by said Board of Trustees to reject any and all of such proposals. Copy of specifications may be procured at the office of the Clerk at the City Hall.

WILLIAM WRIGHT, JR.,
Clerk.

Dated Herkimer, N. Y., August 18, 1909.

## RE-LINING, ELEVATING AND COVERING RESERVOIR.

Doylestown, Pa.

Sealed proposals, addressed to the Borough Clerk, and marked "Proposals for Repairs to Reservoir," will be received by Borough Councils of Doylestown, Bucks County, Pa., until eight (8) o'clock P. M., Thursday, September 9th, 1909, at Council Chamber, in said Borough, then and there to be publicly opened and read by the Clerk, for Re-Lining, Elevating and Covering the Present Reservoir with Steel Reinforced Concrete.

Plans and specifications, with proposal blanks, can be obtained from the Borough Clerk, or the Engineers, Jos. L. Sweigard & Co., Betz Building, Philadelphia, Pa.

Bids must be accompanied by a certified check for 10% of the amount of bid, payable to the Borough of Doylestown.

The reservoir is to be guaranteed by an approved bond for double the contract price, for two years from date of completion and acceptance.

The reservoir will be emptied Sept. 2d, from 10 A. M. until 1 P. M., for inspection, to prospective bidders.

The Council reserves the right to award the work as a whole, to reject any or all bids, and to adjust the amount of the work included in the contract to the amount of funds available for payment of same.

J. HARRISON WILSON, President.
A. HARRY CLAYTON, Clerk.

Doylestown, Pa., August 21, 1909.

U. S. ENGINEER OFFICE, Army Building, New York, N. Y., Aug. 26, 1909.—Sealed proposals for erection of wood jetties for protecting East shore line at Sandy Hook, N. J., will be received at this office until 12 M., Sept. 14, 1909, and then publicly opened. Information furnished on application. S. W. ROESSLER, Col., Engrs.

## CAST-IRON, SPECIALS, VALVES, FIRE-HYDRANTS.

Christiansburg, Va., Aug. 20th, 1909.

Sealed proposals, so marked and addressed to "John R. Johnson, Chairman Special Water Committee, Christiansburg, Virginia," will be received at his office, in Christiansburg, until eight o'clock p. m., on Wednesday, September 8th, 1909, for the furnishing, free on board cars at Christiansburg, Virginia, of about six miles of cast-iron pumping and distributing mains of 10, 8, 6 and 4 inches, and other diameters, with corresponding quantities of special castings and valves, and about forty-six fire-hydrants.

Specifications may be obtained by applying to Howard Murphy, Engineer, Christiansburg, Virginia.

A certified check for $500.00 must accompany each bid to insure the execution of the contract, if awarded.

The right is reserved to reject any or all bids, or to accept and bid for the whole or any portion of said materials.

JOHN R. JOHNSON,
Chairman Special Water Committee.

## SEWER CONSTRUCTION.

Office of the Commissioners of Sewerage of Louisville, Ky. Incorporated.

Sealed proposals for the construction of Sections B-1, B-2, C and D of the Northwestern Sewer, Contract Nos. 53, 54, 55 and 48, will be received at the office of the Commissioners of Sewerage, 605 Equitable Building, Louisville, Ky., until 12 o'clock noon, Sept. 24, 1909.

The work of the several sections briefly stated is as follows:

Section B-1, 3,415 ft. of 9′ 0″ × 13′ 6″ reinforced concrete sewer, 54,000 cu. yds. earth excavation from 15 ft. to 40 ft. deep, 5,350 cu. yds. concrete masonry, and 900,000 lbs. of steel.

Section B-2, 2,970 ft. of 9′ × 9′ to 9′ × 12′ reinforced concrete sewers, 35,000 cu. yds. of earth excavation from 15 ft. to 23 ft. deep, 3,800 cu. yds. of concrete and 390,000 lbs. of steel.

Section C, 4,845 ft. of 6′ 9″ and 8′ 3″ reinforced concrete sewers, 31,500 cu. yds. of earth excavation from 11 ft. to 20 ft. deep, 3,600 cu. yds. of concrete and 360,000 lbs. of steel.

Section D, 3,600 ft. of 6′ 0″ and 6′ 3″ reinforced concrete sewers, 21,000 cu. yds. earth excavation from 18 ft. to 21 ft. deep, 1,900 cu. yds. of concrete, about 216,000 lbs. of steel.

Plans and specifications may be seen at the office of the Commissioners, at the office of Harrison P. Eddy, Consulting Engineer, 14 Beacon St., Boston, Mass., at the office of the Engineering News, 220 Broadway, New York, and 1636 Monadnock Block, Chicago, Ill.

Sealed bids should be endorsed "Proposals for Section B-1" (or B-2, C or D) of the Northwestern Sewer and addressed to the Commissioners of Sewerage, Equitable Building, Louisville, Ky. Each bid must be accompanied by a certified check for at least seven per cent. (7%) of the total amount of the bid, or a "Bidder's Bond" as described in the form of proposal.

W. C. NONES, Chairman.
CHAS. P. WEAVER, Secy. & Treas.
J. B. F. BREED, Chief Engineer.

## PAVING.

Paris, Ill., Aug. 23, 1909.

Sealed proposals for paving South Central Ave., from Jasper Street to Jackson Street, will be received by T. J. Trogdon, President of the Board of Local Improvement of the City of Paris, Illinois, at the office of the City Engineer up until 7.30 o'clock P. M., Sept. 3, 1909, at which time and place all proposals will be opened and read.

Certified check of ten per cent. must accompany all bids. Contractor will be paid in cash and bonds (5 per cent. special assessment). Proposals and specification can be had at the office of the City Engineer.

The right is reserved to reject any or all bids.

The work consists of the following approximate quantities:

5,600 sq. yds. vitrified brick paving on concrete base.

3,425 lin. ft. of combined curb and gutter.

C. P. LYCAN,
City Engineer.

TREASURY DEPARTMENT, Office of the Supervising Architect, Washington, D. C., August 25, 1909.—Sealed proposals will be received at this office until 3 o'clock P. M. on the 5th day of October, 1909, and then opened, for the construction (complete) of the United States Post-office and Court-House at Manchester, N. H., in accordance with the drawings and specification, copies of which may be had at this office or at the office of the Custodian at Manchester, N. H., at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

TREASURY Department, Office of the Supervising Architect, Washington, D. C., August 24, 1909. Sealed proposals will be received at this office until 3 o'clock P. M., on the 1st day of October, 1909, and then opened, for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring) of the U. S. Post Office at Denison, Texas, in accordance with the drawings and specification, copies of which may be obtained from the Custodian of site at Denison, Texas, or at this office, at the discretion of the Supervising Architect. JAMES KNOX TAYLOR, Supervising Architect.

## BRIDGE.

Green River, Utah.

Sealed proposals for the building of a bridge across Green River at Green River, Utah, will be received until 10 A. M., September 11th, 1909, by the Boards of County Commissioners of Grand and Emery Counties when said boards will be opened at Green River, Utah.

All bidders must deposit with Mark Tuttle, Clerk of the Joint Board, who will be at Green River on the day previous to the opening of bids, a certified check on the Fruit Growers State Bank of Green River, Utah, in the sum of $3,000.00 as a guarantee that if the contract is awarded to bidder that he will enter into a contract and execute a bond for the carrying out of said work. Said check must be deposited not later than Sept. 10, 1909, at 6 p. m.

Plans, specifications, form of proposals, etc., can be seen at the office of County Clerk, Emery County, Castle Dale, Utah; County Clerk, Grand County, Moab, Utah, or at the office of E. A. Bricker, Green River, Utah.

The right is reserved to reject any and all bids.

MARK TUTTLE, Secretary,
Joint Board County Commissioners.

## DAM.

Lamar, Colorado.

Proposals will be received by the undersigned company, for the construction of an earth filled dam with concrete or puddled core, tunnels, spill ways, outlet works, main canal and distributing system.

Contents of dam approximately 400,000 cubic yards, height of dam 106 feet, main canal and laterals 350,000 cubic yards of earth, 30,000 cubic yards of rock and 2,700 lineal feet 7 foot wood pipe.

Bids will be received until twelve o'clock noon September 5, 1909.

For further information address.

THE TWO BUTTES IRRIGATION AND RESERVOIR CO.,
Lamar, Colorado.

U. S. ENGINEER OFFICE, Buffalo, N. Y., August 26, 1909.—Sealed proposals for dredging in Harbor Basin at Erie, Pa., will be received at this office until 11 A. M., September 10, 1909, and then publicly opened. Information furnished on application. W. L. FISK, Colonel, Engrs.

WAR DEPARTMENT. Constructing Quartermaster's Office, U. S. A., 263 Summer Street, Boston, Mass., Aug. 16, 1909. Sealed proposals, in triplicate, will be received at this office until 10 o'clock A. M., Sept. 15, 1909, and then opened, for construction of roads and walks, and the necessary grading at Fort Andrews, Mass. Plans can be seen, specifications, blank forms and full information obtained at this office. Deposit of $10.00 required to guarantee return of plans and specifications. The United States reserves the right to reject any or all proposals. Envelopes should be endorsed "Proposals for roads, walks and grading, Fort Andrews, Mass.," and addressed to CAPTAIN R. H. ROLFE, Constructing Quartermaster, Boston, Mass.

# Situations Wanted

### Civil Engineers.

CIVIL ENGINEER, 10 years' experience in charge real estate subdivision and development, and railroad construction; at liberty Sept. 1st, owing to completion of present work; can report sooner if necessary; good draftsman and expert computer; can furnish references from responsible people; interview desired. Address "M. B. 9," Engineering News, New York. 9-1t

LEHIGH GRADUATE CIVIL ENGINEER, four years' experience as assistant engineer, location and construction, heavy concrete foundations, etc.; good draftsman, estimator, accurate and reliable instrumentman; employed; best references, including from present employer. Address "F. B. 9," Engineering News, New York. 9-2t

CIVIL ENGINEER, graduate Lawrence Scientific School, Harvard, 1909, desires position, field or office; good draftsman. Address "D. B. 9," Engineering News, New York. 9-2t

ESTIMATOR, graduate engineer, at present employed, desires position with general contractor or structural steel firm; experienced in designing, estimating and detailing structural steel; executive ability. Address "W. B. 9," Engineering News, New York. 9-2t

### Bridge and Structural Engineers.

STRUCTURAL ENGINEER desires responsible executive position with general contractor or structural steel plant; eight years' practical experience in various responsible positions; detail experience given by addressing "P. 6," Engineering News, New York. 9-1t

### Mechanical and Electrical Engineers.

MECHANICAL ENGINEER with experience on general machinery, automobile and printing press design, wants position of the drafting room. Address "X. 7," Engineering News, New York. 9-1t

MECHANICAL ENGINEER experienced in design of general and special machinery; shop practice. Address "C. A. 9," Engineering News, New York. 9-2t

### Surveyors.

COLLEGE AND TECHNICAL GRADUATE, two years' drafting, desires change to general engineering work, testing or surveying, in or near New York city. Address "S. B. 9," Engineering News, New York. 9-1t

### Draftsmen.

DRAFTSMAN, general on power-houses, foundations, piping and mill work. Address "K. B. 9," Engineering News, New York. 9-1t

WANTED—Position as Engineer or Draftsman with coal company; references from present and former employers. Address "G. B. 9," Engineering News, New York. 9-3t

WANTED—By lady, position as draftsman in engineer's office; salary moderate. Address "M. 7," Engineering News, New York. 9-1t

### Superintendents, Misc., etc.

UNIVERSITY GRADUATE, A. B. and Mech. E., 26 years old, American, two years' experience drafting, wants change to testing, shop or field work, with opportunity for advancement; has some knowledge of German and Spanish. Address "G. A. 6," Engineering News, New York. 9-1t

STRUCTURAL STEEL AND REINFORCED concrete engineer open for engagement; can invert; $3,000. Address "O. B. 9," Engineering News, New York. 9-1t

YOUNG MAN, technical education, engineering ability, experienced, reinforced concrete, steel and mill construction, wishes position as assistant to constructing engineer; good draftsman; references. Address "O. 8," Engineering News, New York. 9-1t

# Situations Open

WANTED—An experienced instrumentman with instruments capable of taking charge of a party. Must have had experience on water-works, sewerage, reinforced concrete and roads. State age, experience in detail, salary expected and be able to report at once. Address "R. B. 9," Engineering News, New York. 9-1t

# Miscellaneous Wants

ENGINEER wanted who can invest $15,000 to $25,000 in structural steel fabricating plant. Want a man who will be financially interested with parties who are able to secure business and can furnish $75,000 to $85,000. Address "I. B. 9," Engineering News, New York. 9-1t

WANTED DRAFTSMEN—We are desirous of receiving applications from first-class men for work on Blast Furnace, Power Plant, reinforced concrete and general construction in connection with a large industrial plant in the south; state fully age, experience, married or single and salary expected. Address "X. B. 9," Engineering News, New York. 9-1t

WANTED—Marine engine and boiler draftsmen at $2.80, $3.76, $4.48 and $5.04 per diem. A competitive examination will be held September 13, 1909, to fill the above positions. For further information address "Commandant," Navy Yard, Brooklyn, N. Y. 9-3t

WANTED—A man to take charge of structural steel fitting and riveting department; must be steady, sober and a hustler; location, central west. Address "Z. B. 9," Engineering News, New York. 9-2t

WANTED — Several first-class draftsmen and checkers on structural work; state age, experience, salary expected. Apply by letter only. Address "A. B." Room 1618, Pennsylvania Building, Philadelphia, Pa. 9-4t

SUPERINTENDENT on reinforced concrete building work; must be a graduate of an Engineering College and have had at least five (5) years' experience on construction work. This experience, however, need not have been in reinforced concrete work. Write or apply in person on Saturday, August 28th, between one and three P. M., or on Tuesday, August 31st, between four and six P. M. TURNER CONSTRUCTION COMPANY, 11 Broadway, New York City. 9-1t